
NATIONAL FIRE INCIDENT REPORTING SYSTEM

Version 5.0 Design Documentation

**Specification Release 2002.2
July 2002**



FEDERAL EMERGENCY MANAGEMENT AGENCY

**UNITED STATES FIRE ADMINISTRATION
NATIONAL FIRE DATA CENTER**

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Section 1	<i>Executive Summary</i>	1
	Introduction	1
	<i>How NFIRS Works</i>	1
	<i>The Benefits of NFIRS to Firefighters</i>	2
	<i>Coding Background</i>	3
	<i>NFIRS Background</i>	3
	<i>NFIRS Today</i>	3
	<i>What is NFIC?</i>	4
	<i>History of NFIRS Participation</i>	4
	Roles and Responsibilities	5
Section 2	<i>System Overview</i>	7
	The Data-based Decision-making Process	7
	<i>The All-Incident Reporting System</i>	8
	System Design Objectives.....	9
	Benefits.....	9
	<i>Ease of Use</i>	9
	<i>Compatibility</i>	10
	<i>Comprehensiveness</i>	10
	<i>Reliability</i>	10
	<i>Usefulness</i>	11
	System Module Overview	11
	<i>Basic Module (NFIRS-1)</i>	11
	<i>Supplemental Module (NFIRS-1S)</i>	12
	<i>Fire Module (NFIRS-2)</i>	13
	<i>Structure Fire Module (NFIRS-3)</i>	14
	<i>Civilian Fire Casualty Module (NFIRS-4)</i>	15
	<i>Fire Service Casualty Module (NFIRS-5)</i>	16
	<i>Emergency Medical Services (EMS) Module (NFIRS-6)</i>	17
	<i>Hazardous Materials (HazMat) Module (NFIRS-7)</i>	18
	<i>Wildland Module (NFIRS-8)</i>	19
	<i>Apparatus Module (NFIRS-9)</i>	20
	<i>Personnel Module (NFIRS-10)</i>	21
	<i>Arson Module (NFIRS-11)</i>	21
Section 3	<i>Technical Documentation</i>	23
	System Architecture	23
	System Modules	25
	Module Logic Flow	43
	Edit Requirements	65
	Relational Edits	98
	Incident Module Rules	107
	System Field Security Levels	108
	Incident Flat File Transfer Format	127
	<i>Overview</i>	127
	<i>Transaction Record Hierarchy</i>	127
	<i>Delimiters</i>	128

<i>Transaction Record Termination</i>	128
<i>Vendor Identification and Software Identification</i>	129
<i>Addition, Deletion, Change and No Activity Transaction Flags</i>	129
<i>Fire Department Transactions</i>	130
<i>Sequence Numbering Methodologies</i>	130
<i>Data Types Legend</i>	130
<i>Positive and Negative Numbers</i>	131
<i>Multiple Choice Fields</i>	131
<i>Date and Time</i>	131
<i>Zip Code</i>	131
<i>User Defined Transactions</i>	132
Data Dictionary	158
<i>Basic Module Data Dictionary</i>	159
<i>Fire Module Data Dictionary</i>	169
<i>Structure Fire Module Data Dictionary</i>	184
<i>Civilian Fire Casualty Module Dictionary</i>	186
<i>Fire Service Casualty Module Data Dictionary</i>	189
<i>EMS Module Data Dictionary</i>	195
<i>HazMat Chemical Database</i>	198
<i>Hazardous Materials Module Data Dictionary</i>	199
<i>Wildland Module Data Dictionary</i>	239
<i>Apparatus or Resource Module Data Dictionary</i>	243
<i>Personnel Module Data Dictionary</i>	244
<i>Arson Module Data Dictionary</i>	245
Conversion Tables for NFIRS 4.1 to 5.0	248
<i>General guidelines</i>	248
<i>NFIRS 4.1 Carryover Elements</i>	248
<i>Basic, Fire, and Structure Modules</i>	249
<i>Civilian Casualty Module</i>	278
<i>FireFighter Casualty Module</i>	282
<i>Hazardous Materials Module</i>	302
NFIRS 5.0 Vendor Software Development Procedures	311
Query and Reporting Requirements	313
<i>Reporting Requirements</i>	313
<i>Tally Report</i>	317
<i>Fire Cause Categories Report</i>	318
<i>Fire Department Information Report</i>	321
<i>Cross Tabulation Report</i>	321
<i>Fires Under Investigation Report</i>	322
<i>Mutual Aid Matching Departments Report (State Level Report only)</i>	322
<i>Top Five Category Report</i>	323
<i>Selected Statistics / Fire Department Management Activity Report</i>	324
<i>Data Quality Report</i>	325
<i>Forms Based Incident Report</i>	325
<i>Additional Reporting and Query Requirements</i>	326
 Section 4	
<i>System Implementation Guidelines</i>	327
System Selection Issues.....	327
Platform Architecture Overview	327
<i>Stand Alone Personal Computers (PC)</i>	327
<i>Local Area Network</i>	329

Wide Area Network.....	331
Mainframe Computer.....	333
Network Server Overview.....	333
Application Server.....	335
Software Selection Issues.....	337
Off-the-Shelf Products.....	337
Custom Application Development.....	337
USFA Supplied Software.....	338
Quality Control Issues.....	338
Software Certification.....	338
Documenting the Incident.....	338
Data Edits and Error Corrections.....	339
Timely Data Submission.....	339
Maintaining Fire Department Identification and Participation Information.....	339
Training Issues.....	340
Audience.....	340
Fire Department Personnel.....	340
Data Management Personnel.....	340
Chiefs, Officers, and Data Users.....	341
Training Frequency.....	341
Training Approaches.....	341
Implementation Action Plan.....	342

Section 5

Standard USFA Software Implementation Guidelines 345

State Software.....	345
Data Entry Tool.....	345
Data Validation Tool.....	346
Data Conversion Tool.....	346
Program Manager Administration Tool.....	346
System Administration Tool.....	347
Reporting Environments.....	347
Implementation Options.....	348
Implementation Using National Database.....	348
Implementation Using State Database.....	349
Hardware and Software Implementation Requirements.....	350
National Fire Data Center Hardware and Software.....	350
State, Metro and Local Hardware and Software.....	351
Pre-Implementation Activities Guide.....	354

Executive Summary

Introduction

The objective of this manual is to provide local and state fire agencies with the specifications necessary to develop version 5.0 of the National Fire Incident Reporting System (NFIRS). To meet this objective, three major sections are included in this document.

- Overview of the NFIRS 5.0 System
- Data Dictionary, Edits and Transfer File Specifications
- System Implementation Guide

One critical success factor in establishing an all-incident NFIRS is a complete system specification that is accepted as the national standard for fire incident reporting. This document serves as both a national standard and a guide for implementing NFIRS 5.0 at the local and state levels.

NFIRS 5.0 is designed to be a modular, all-incident reporting system. The system was designed by the United States Fire Administration, a part of the Federal Emergency Management Agency.

How NFIRS Works

NFIRS is jointly managed by the U.S. Fire Administration (USFA) and the National Fire Information Council (NFIC). NFIC is a users' group comprised of volunteers who donate their time to maintain the existing system and to research and implement changes to improve it. The members of NFIC are representatives from state agencies and large metropolitan areas that are responsible for incident data collection and analysis. As federal budgets have been reduced, the role of NFIC has expanded. Due to the extraordinary commitment of the members of this council, as well as the ongoing support of USFA, NFIRS is able to maintain its high level of performance.

As critical a role as the members of NFIC play, the heart of the system is dispersed across the country, in the 14,000 fire departments that participate in NFIRS. After responding to an incident, fire department personnel fill out the appropriate NFIRS modules. These describe the nature of the call, the actions firefighters took in response to the call, and the

result. The latter includes the number of civilian or firefighter casualties and an estimate of property loss. While specific modules filled out by a local fire department may be state-specific, they contain a core of information common to every state's reporting system. The uniformity of definitions used in coding these fields makes aggregation of national data possible.

Local agencies forward the completed NFIRS modules, which are filled out either manually or via computer, to the state agency responsible for NFIRS data. The state agency combines the information with data from other fire departments into a statewide database and then electronically submits the data to the National Fire Data Center (NFDC) at the U.S. Fire Administration. The NFDC can then compare and contrast statistics from states and large metropolitan departments to develop national public education campaigns, make recommendations for national codes and standards, guide allocation of federal funds, ascertain consumer product failures, identify the focus for research efforts, and support federal legislation. The annual NFIRS data are used as the basis for the U.S. Fire Administration's publication *Fire in the United States*, which is the single most comprehensive reference on the nature and scope of the fire problem in the U.S.

At the national level, data combined from participating states is also used by information partners, including:

- U.S. Consumer Product Safety Commission (CPSC)
- International Association of Fire Chiefs (IAFC)
- International Association of Firefighters (IAFF)
- National Association of State Fire Marshals (NASFM)
- National Fire Protection Association (NFPA)
- National Highway Traffic Safety Administration (NHTSA)
- National Volunteer Fire Council (NVFC)

The Benefits of NFIRS to Firefighters

The new system is specifically designed to be more firefighter friendly. Two additional modules, the Apparatus and Personnel Modules, have been added to assist fire departments in managing apparatus, personnel, and resources.

Every fire department is responsible for managing its operations in such a way that firefighters can do the most effective job of fire control and fire prevention. Effective performance requires careful planning, which can only take place if accurate information about fires and other incidents are available. Patterns that emerge from the analysis of incident data can help departments focus on current problems, predict future problems in their communities, and measure their programs' successes.

The same principle is also applicable at the state and national level. NFIRS provides a mechanism for analyzing incident data at each level to help meet fire protection management and planning needs. In addition, NFIRS information is used by labor organizations on a variety of matters, such as workloads and firefighter injuries.

Coding Background

Incident data collection is not new. Many cities and states have used data systems for years – some doing their analyses by hand, some using computer systems.

In 1963, the National Fire Protection Association (NFPA) formed a technical committee to devise a uniform system of fire reporting to encourage fire departments to use a common set of definitions.

A dictionary of fire terminology and associated numerical codes was developed. This dictionary is known as NFPA 901, *Standard Classifications for Incident Reporting and Fire Protection*. As the fire service gained experience with this fire data “language,” improvements were made to the system. The current set of codes used in NFIRS 5.0 represents the merging of the ideas from NFPA 901 and the many suggested improvements from the users of the NFIRS 4.1 coding system.

NFIRS Background

In 1972, the President's Commission on Fire Prevention and Control issued a document entitled, *America Burning*. This document was the first “in-depth” discussion of this country's fire problem. The outgrowth of *America Burning* was the National Fire Prevention and Control Act, Public Law 93-498, which established the National Fire Prevention and Control Administration.

One of the results of the Public Law 93-498 mandate to collect national data on fires was the establishment of the National Fire Incident Reporting System. In 1976, six states piloted what was to become the National Fire Incident Reporting System, or NFIRS. The U.S. Fire Administration developed NFIRS as a means of assessing the nature and scope of the fire problem in the U.S.

NFIRS Today

The NFIRS system first came on line in 1976, and since then, it has grown in both participation and use. At the time this handbook was being prepared, 42 states and over 14,000 of this nation's fire departments were participating in NFIRS. This makes NFIRS the largest collector of fire-related incident data in the world. NFIRS contributes over 900,000 fire incidents each year to the National Fire Database.

Some states and fire departments are just beginning to participate in NFIRS, others have large databases containing several years of data. NFIRS data is being used at all levels of government: local, state, and national.

At the local level, incident and casualty module information is being used for setting priorities and targeting resources. The data now being collected is particularly useful for designing fire prevention/education programs and EMS-related activities specifically suited to the real emergency problems the local community is currently facing.

On the state level, NFIRS is being used in many different capacities. One valuable way that it has aided the states is through work with the legislature. NFIRS has been used to justify state budgets and has helped in the passage of important bills on fireworks and arson. As in the local level, the data collected is particularly useful for designing fire prevention and education programs.

Nationally, NFIRS has been used by various private industry organizations, including national associations for home appliance product manufacturers, the hotel and motel industry, insurance companies, attorneys and many others.

Many other federal agencies (aside from FEMA and the USFA) use NFIRS data, such as the Consumer Product Safety Commission, the National Highway Traffic Safety Administration, and the National Institute of Standards and Technology. The Consumer Product Safety Commission has found this system very useful in finding products that could be a hazard to consumers. With each year, the quality of the available data is improving and new and better ways to use it are devised.

What is NFIC?

As the number of NFIRS states and major metropolitan areas increased from six initial states to 42 states and 34 major metropolitan areas, it became apparent that some organization was needed to give these NFIRS participants a forum to exchange ideas and discuss common problems. The National Association of NFIRS States (NANS) was established in 1979 to provide this opportunity. Through continued change and alignment of state and metro participation in the overall operation of the NFIRS System, the importance of NANS increased.

In 1981, the name of the organization was changed to the “National Fire Information Council,” or NFIC. Each state participating in NFIRS has one representative in NFIC, as does each major metropolitan area that serves 500,000 or more people.

NFIC is governed by a board of 15 directors, three from each of four geographical regions and three from metro areas. Members of the board are elected at an annual conference. The board acts as a liaison between USFA and NFIRS participants for major policy decisions concerning NFIRS operations or support.

History of NFIRS Participation

Because NFIRS is a voluntary system, not all states or fire departments within states participate. In 1977, one of the early years of the system, five states regularly reported data to the National Fire Data Center, and 19 others had data systems in some stage of development. Since then participation has increased to 42 states, and over 14,000 fire departments report to NFIRS. It is estimated that 44 percent of all fires to which fire departments respond are captured in NFIRS, making NFIRS an extremely large sample of all fires that occur each year.

Because states have the flexibility to adapt their state reporting systems to their needs, and since reporting by localities is voluntary, the design of a state's data collection system can vary from state to state. However, NFIRS was designed so that data from state systems can be converted to a single format that is used at the national level to aggregate and store NFIRS data.

The existing NFIRS employs techniques of data entry, validation, transmittal and analysis that represented the state-of-the-art at the time of its original design in the late 1970's. Advances in computer technology have now far eclipsed the current NFIRS. Survey feedback from participating fire departments, states and vendors has resulted in valuable sug-

gestions to improve the system, many of which cannot easily be implemented within the current system due to the vintage of its architecture.

Roles and Responsibilities

United States Fire Administration. Provide oversight and leadership in developing NFIRS 5.0 specifications and maintaining the National Fire Data Center.

National Fire Information Council. Coordinate the implementation and ongoing training and overall policy decision-making functions to support NFIRS.

State Fire Marshals/State Incident Reporting Focus. Implement and maintain an active NFIRS 5.0 compliant data collection program within their jurisdiction, provide statewide data management policy making, and act as a central focus for information management at a state level.

Local Agencies. Document incidents and implement and maintain an active NFIRS 5.0 compliant reporting system.

Information Partners. Use the data/information and make suggestions for improvement and/or additions to the system. Support and encourage the use and expansion of NFIRS 5.0 compliant systems. Work with NFIC to create updates and improvements that will meet the dynamic needs of the fire service.

System Overview

The Data-based Decision-making Process

Fire personnel accurately recording the circumstances of all incidents, using a reliable and consistent coding methodology, is the first step in the data reporting process and a key for developing profiles that affect a department's decisions. Incident data can be used by fire departments to document their experience, support all types of management decisions, and identify, prepare and justify budget requests.

Consistent response data supports local decision making in administration and operations.

Local agencies then can send their incident data to the state, where the information is combined with data from other fire departments into a statewide database. By combining data at the state level, trends in fire problems can be detected that are often too infrequent to be seen at the local level and a state fire profile developed. Trend information can be used to target fire safety and prevention programs, as well as assist in identifying the safety level of products and practices. For these reasons, fire incident reporting is mandatory in many states.

State-level data points policymakers to problems that need a broadly-based response.

State incident data is sent to the National Fire Data Center (NFDC) at the United States Fire Administration for further analysis. The NFDC can compare and contrast statistics from states and large metropolitan departments to develop national public education programs, make recommendations for national codes and standards, guide allocation of federal funds, identify consumer product failures, identify the focus for research efforts, and support federal legislation, such as the Hotel/Motel Fire Safety Act (Pub. L. 101-391 - Sept. 25, 1990).

National level data can be used by information partners to address community risk reduction issues.

At the national level, data combined from participating states can be used by the information partners. These organizations use national-level fire data to establish policy, allocate funds, and set standards to affect the fire problem. Decision-making based on incident patterns identifies common areas for prevention and high-risk products, and geographic areas so partners can take steps in response.

Addressing issues nationally can help local emergency responders acquire resources to address high-risk issues.

The purpose at all levels in the data reporting system is to provide timely and reliable information that supports the decision-making process, whether it is a fire captain identifying target hazards and properly deploying resources based on incident information, or the CPSC banning unsafe products like flammable sleepwear for children.

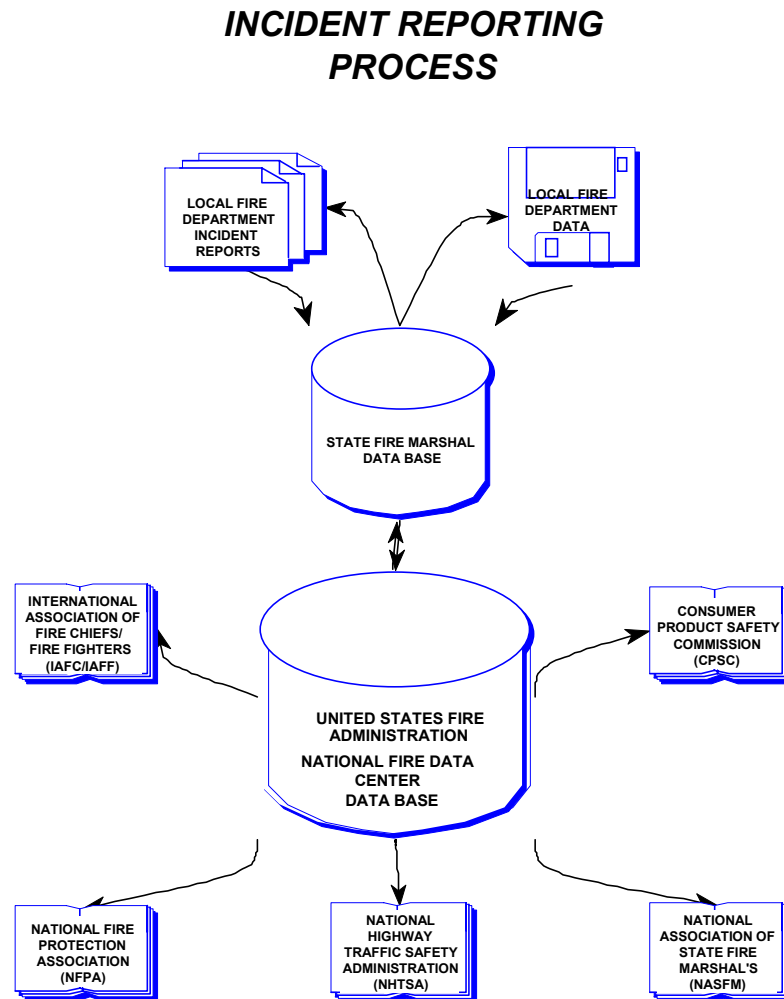
The All-Incident Reporting System

The USFA, as well as many states, is mandated by law to collect information on fires, and rely on the nation's fire service to meet that requirement through the National Fire Incident Reporting System (NFIRS). The NFIRS (Version 4.1) cannot adequately meet today's fire service information needs because it was designed to collect only fire information, which represents a fraction of the tasks performed by the fire service. The new NFIRS will address the fire service's need for a system that accounts for the full range of fire department incidents.

NFIRS 5.0 is based on 20 years of experience in data management among current NFIRS users, and ideas from national fire service organizations.

NFIRS program managers representing 42 states and 34 metro fire departments have learned many lessons about fire reporting during the past 20 years. With the input of state Fire Marshals, Metro Fire Chiefs, local Fire Departments, and customers such as the IAFC, IAFF, NFPA, CPSC, and NHTSA, they developed NFIRS 5.0, guided by the following specific design objectives.

FIGURE 2-1. Incident Reporting Process



System Design Objectives

NFIRS 5.0 records information about all responses, not just fires.

NFIRS 5.0 is broadly supported by national organizations.

NFIRS 5.0 is flexible and adaptable, working with a variety of hardware and software systems, including previous editions of NFIRS.

- Create an All-Incident Reporting System. To keep pace with the rapidly changing activities of the fire service, NFIRS 5.0 must be designed as an “all-incident” system including, but not limited to: Fire, EMS, HazMat, Wildland and Arson incidents. Inclusion of new incident types must be supported by the NFIRS 5.0 Standard.
- Develop a set of reporting codes that can accurately, reliably and easily describe any incident. All data should be readily collectible, reportable and usable.
- Promote uniformity of incident reporting by establishing the NFIRS 5.0 coding methodology as the accepted national standard, with the consensus of the USFA, NFIC, NFPA, IAFC, IAFF, NASFM and other information partners.
- Make the system hardware platform independent. The NFIRS 5.0 Design Specifications must support the development of a data collection system on any hardware platform to ensure its universal acceptance and the capability to integrate with existing systems, where needed.
- Make the system application software/database independent. The NFIRS 5.0 Design Specifications must support the development of a data collection system using industry standard software that is non-proprietary to the specification. This will help to ensure universal acceptance of the NFIRS 5.0 Standard and allow for its integration with existing systems.
- Map the historical data from the old system to the new system where feasible.
- Preserve the ability for a state to collect Version 4 or 4.1 incident reports without maintaining a separate database.

Benefits

A modular design increases the system flexibility, and decreases data collection.

The new system is modular in design and only uses the modules necessary to describe the incidents. Data is collected for all incident types in one basic module. More detailed information can be collected with other modules to further profile fires, structure fires, civilian casualties, fire fighter casualties, hazardous materials, wildland fires, arson, apparatus, personnel, and EMS incidents as necessary.

The modular design makes the system easier to use because only the data required to profile the extent of the incident is captured. Accuracy and reliability have been improved by modifying the coding system.

Ease of Use

Data coding has been revised to reduce confusing classifications.

Abbreviated reporting for most incidents will reduce data collection and classification times.

- Simplifies look-ups by alphabetizing coding lists with multiple choices for the same code.
- Merges the codes ending in 9 and 0. Version 4.1 required a distinction between the codes ending in 9, “not otherwise classified”, and the codes ending in 0, “insufficient information to classify further”. The proper distinction between these two codes is often not observable in the field.
- Eliminates compound codes. Some of the previous codes have contained embedded multiple questions. NFIRS 5.0 splits these elements, since they are often confusing to the reporter and result in ambiguous or erroneous answers. Although this may increase the number of fields, the choices will be clearer among alternatives and the number of codes are decreased. For example, “Equipment Involved in Ignition” in Version 4.1 is a

long, complex list of equipment that includes factors on power source and use. Version 5.0 creates just three categories (Equipment, Equipment Portability, and Equipment Power Source) to make coding easier, more accurate, and specific.

- Provides for abbreviated reporting of self-contained, non-loss fires by using a basic incident form that can be completed with as little as three look-ups. This may represent the majority of all fire incidents in many jurisdictions.
- Abbreviates paths through the system for nuisance fires where there have been no losses or casualties. This will eliminate the amount of information that needs to be entered into the system.
- Documents small spills of common hazardous materials on the basic form. More detailed information can be provided on the optional hazardous materials module if a serious release of hazardous materials occurs.

NFIRS 5.0 works with current technology and anticipates future equipment and software developments.

Compatibility

- Compatible with current electronic technology. Version 5.0 is designed for electronic media technology. The design specification in Section 3 contains specific data libraries, programming specifications, and data flow charts.
- Includes a mapping strategy back to Version 4.1 to provide for statistical analysis of historical data.
- Designed to support current and anticipated technologies: client-server, object-oriented database; and Internet WEB server technology.
- Allows for the inclusion of optional state or local data storage and retrieval. This data is for use at the local or state level only.
- Recognizes that there may be a need for additional data elements to meet the local situation.

NFIRS 5.0 offers more precise information classification.

Comprehensiveness

- Collects behavioral information on multiple levels, e.g., children playing with fire, age range, what they used to set the fire, and if they were alone at the time of the incident.
- Formats the address to allow computerized queries and street-based address matching for Geographic Information System (GIS) purposes.
- Breaks fire losses into property and contents to better define structure losses. Pre-incident value is also now captured as an optional data element.
- Captures specific property information about multiple on-site materials and their use. This will allow identification of non-intended or illegal uses of property, such as residential drug houses or laboratories.
- Notes information on the number of acres burned for all fires. Specific and detailed information about wildland or large open fires is captured for those fires only.
- Represents missing (not-reported) data as blanks system wide. Missing data will no longer be lumped in with undetermined default code values.

NFIRS 5.0 data fields can capture information beyond simple incident descriptions.

Reliability

- Profiles fire prevention and code issues that affected the fire.
- Captures multiple factors contributing to the causes of the fire for the first time. This allows identification of juvenile fire setters, gang involvement in fires, alcohol and cigarette interaction, as well as drugs and youth involvement by age categories.

- Expands on equipment involved in starting fires. Detailed tracking of specific equipment involved in fire ignitions is possible.
- Highlights factors that affect fireground suppression. Burglar bars, high-rack storage, balloon construction and unprotected vertical openings are some examples of this information.

Usefulness

Administrative information is routinely gathered and classified.

- Provides better information on the impact of fire protection features.
- Transmits certification of applications with certification numbers to the state.
- Includes carbon monoxide incidents.
- Notes one-time information for special studies purposes.
- Groups fire service resources for apparatus and personnel by use at the incident. Specific, detailed information about the use of fire service personnel and apparatus will be collected in a standard way for the first time in optional modules. This will permit staffing studies on several levels of use.
- Outlines detailed information on the impact of fires on buildings. Information on the building's size, number of stories and status is now available. Specific information on fire origin, damage patterns, flame spread and materials contributing to flame spread is captured as well.
- Expands information on detectors and automatic suppression systems. Information on the system's presence, range, power supply, effectiveness, operation, and reason for failure is included.
- Extends information on casualties to provide a better understanding of the relationship of the casualty to factors contributing to injury, as well as the nature and cause of injuries.

Data fields profile building and systems information that can be used to develop prevention strategies.

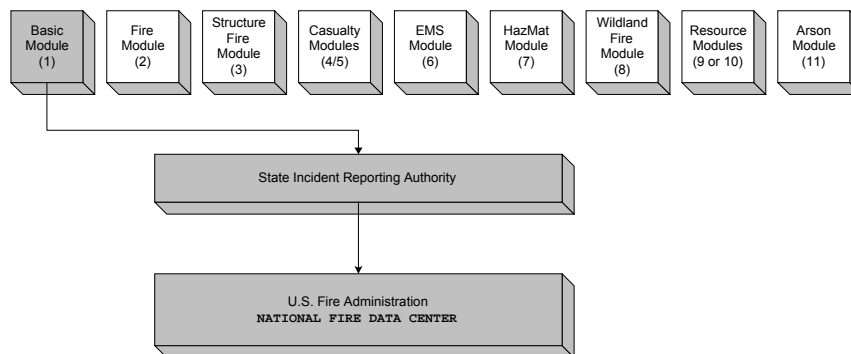
System Module Overview

Version 5.0 uses a modular format to increase the accuracy and applicability of data collection for all incident types. The overall number of data fields has been increased. However, because 5.0 takes advantage of selective field entries based on incident type, the number of fields used to define an incident has decreased compared to Version 4.1. Version 5.0 has eleven modules that are described below.

Basic Module (NFIRS-1)

Most incidents can be profiled using a single set of data fields.

The Basic Module is used for every incident. This may be the only module necessary for certain incident types such as confined fires, small vegetation fires, outside rubbish fires, explosions, and other incidents classified as "other fire types and non-fires." This feature satisfies the request for short form fire reporting.

FIGURE 2-2. Basic Module

NFIRS-1 includes information on:

- Fire Department Identifier
- Location
- Incident Type
- Aid Given or Received
- Dates And Times/Shifts/Special Studies
- Actions Taken
- Dollar Losses And Values
- Casualties
- Hazmat Releases
- Property Use
- Persons and Entities Involved

A basic module would be completed for incidents similar to these examples:

- Food on Stove/Contained No-loss Fires
- Outside Trash Fire
- Major Accidents
- First Responder Calls
- Assist Police

Supplemental Module (NFIRS-1S)

The Supplemental Module adds flexibility to any incident report by expanding the data.

This Module is used to record additional information as required by the local fire department.

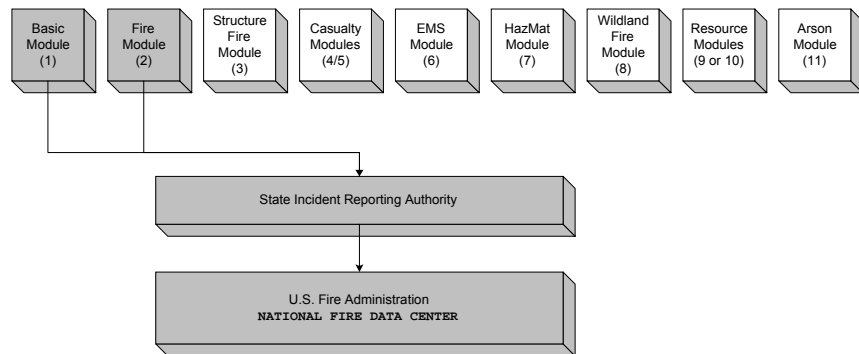
The NFIRS-1S includes information on:

- Person/Entity Involved
- Special Studies

Fire Module (NFIRS-2)

The Fire Module is used to record information on incidents involving fires, including buildings, outside storage fires, vehicle fires, and larger vegetation fires. As an option, the wildland module can be used for vegetation and other outside fires. Building fires require the use of the Structure Fire Module.

FIGURE 2-3. Fire Module



NFIRS-2 includes information on:

- Property Details
- On-Site Materials
- Ignition: Area, Source of Ignition, Material Ignited, Factors Contributing, Human Issues, Equipment Involved
- Human Factors Involved
- Mobile Property Description
- Fire Origin and Spread Description
- Fire Suppression Factors

Actual fire incidents are profiled in depth, using a dedicated module.

A Basic Module and Fire Module would be completed for incidents as outlined in the following example:

Car Fire

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the basic module.

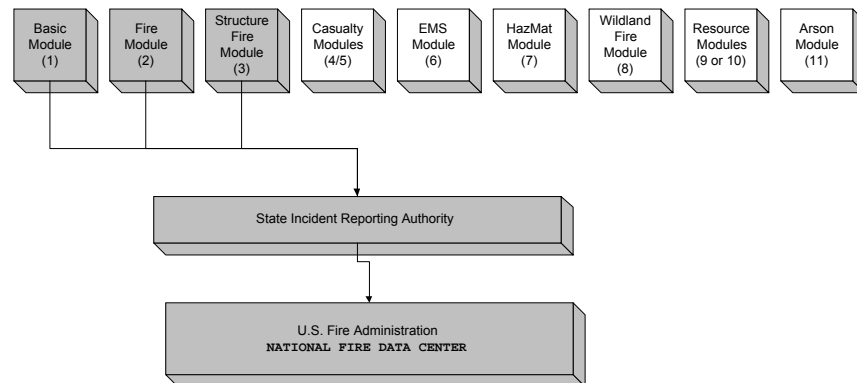
The identifier, on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property sections would be completed for the fire module.

If multiple persons and entities are involved, the supplemental module would be used to record the additional details.

Structure Fire Module (NFIRS-3)

The Structure Fire Module is used to record information on incidents involving structure fires.

FIGURE 2-4. Structure Fire Module



NFIRS-3 includes information on:

- Structure type
- Building status, height, main floor size
- Fire origin, fire spread, number of stories damaged by flame
- Material contributing to flame spread
- Presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason
- Presence of automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason

Structure fires can be described through fire and structure module data, personnel information, and apparatus response details.

A Basic Module, Fire Module and Structure Fire Module would be completed for incidents such as these examples:

House Fire

At a minimum, the Basic Module, the Fire Module and the Structure Module would be completed for a house fire. Additional modules may be required if there are casualties, etc.

The Basic Module records the location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties, property use and persons involved.

The Fire Module records the on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property.

The Structure Fire Module records the building status, building size, main floor size, fire origin, fire spread, number of stories damaged by flame, presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason, presence of automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason.

Either the resources section on the Basic Module or the Apparatus or Personnel modules could be used. If there are civilian or firefighter casualties, then the appropriate casualty module would be used.

If multiple persons and entities are involved, then the modules for other resources would be used.

Hotel Fire

At a minimum, the Basic Module, the Fire Module and the Structure Module would be completed for a hotel fire.

The Basic Module records the location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties, property use and persons involved.

The Fire Module records the on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property.

The Structure Fire Module records the building status, building size, main floor size, fire origin, fire spread, number of stories damaged by flame, presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason, presence of automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason.

Larger fire incidents can be extensively described through available data fields and supplemental modules.

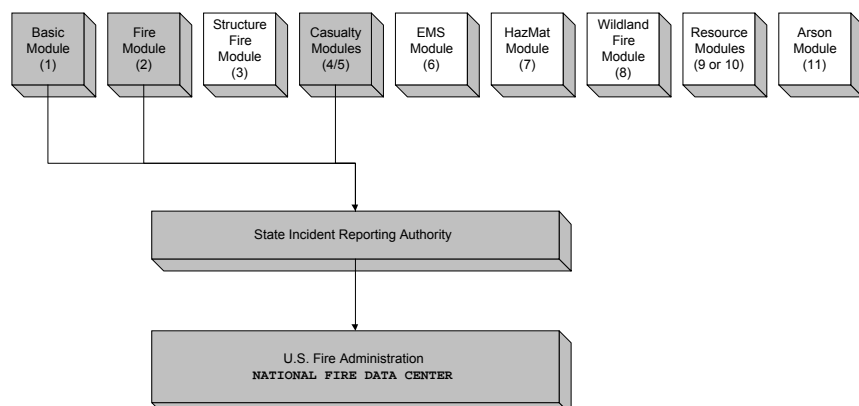
Either the resources section on the Basic Module or the Apparatus or Personnel modules could be used. If there are civilian or firefighter casualties then the appropriate casualty module could be used.

If multiple persons and entities are involved, the supplemental module would be used to record the additional details.

Civilian Fire Casualty Module (NFIRS-4)

The Civilian Casualty Module is used whenever a fire incident type involves a civilian injury or fatality.

FIGURE 2-5. Civilian Fire Casualty Module



Civilian Casualty information can be used to develop prevention responses.

NFIRS-4 includes information on:

- Person's identification
- Demographic information
- Injury causes, including human and contributing factors
- Activity when injured
- Location when injured
- Symptoms and portion of body injured
- Disposition

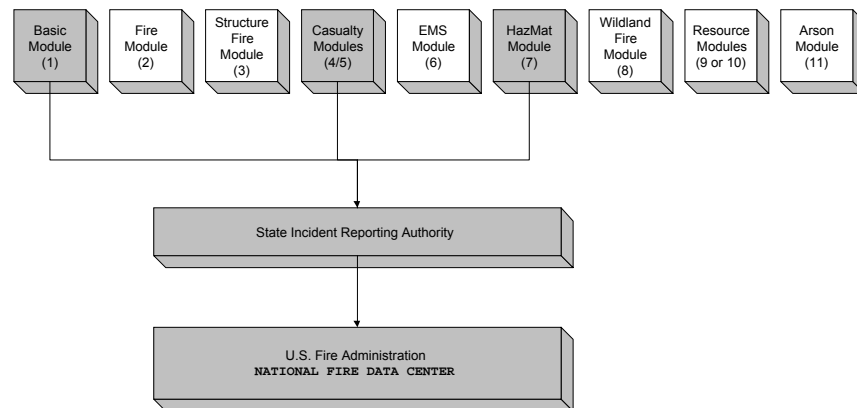
At a minimum, the Basic Module and the Fire Module must be completed. Depending on the incident, the Structure Fire Module may also be required.

Fire Service Casualty Module (NFIRS-5)

Firefighter casualty information can be used by Health and Safety Officers to reduce risks at incidents.

The Fire Service Casualty Module is used when fire service personnel suffer an injury, fall or exposure involved with any incident. When the Fire Service Casualty Module is used, at a minimum the Basic Module must also be completed.

FIGURE 2-6. Fire Service Casualty Module



Other modules may also be required depending on the incident type.

NFIRS-5 includes information on:

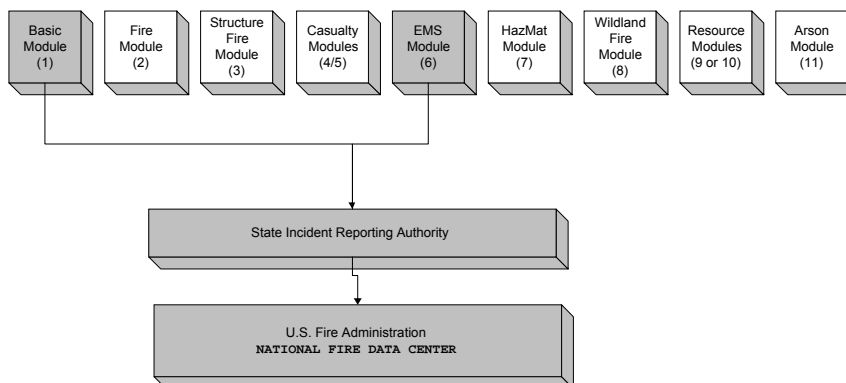
Medical service activities can be profiled as an operations function for management and strategic decision-making.

- Person's identification and age
- Injury time
- Assignment and activity at time of injury
- Severity of injury and disposition
- Location of victim when injured
- Symptoms and portion of body injured
- Cause of injury, factors contributing, object involved
- Where injury occurred
- Equipment profiles

Emergency Medical Services (EMS) Module (NFIRS-6)

The EMS Module is used as an option at the local level when the fire department provides emergency medical service.

FIGURE 2-7. Emergency Medical Services (EMS) Module



NFIRS – 6 includes information on:

- Incident location and type
- In service dates and times
- Provider assessment
- Victim demographics
- Injury/illness description
- Procedures used
- Safety equipment involved
- Care level
- Patient status and disposition

Emergency Medical Services Module example:

Rescue Run

A rescue run would use the Basic Module as well as the EMS Module and possibly one of the other resources modules.

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the Basic Module.

Either the resources section on the Basic Module or the Apparatus Module or Personnel Module would be used.

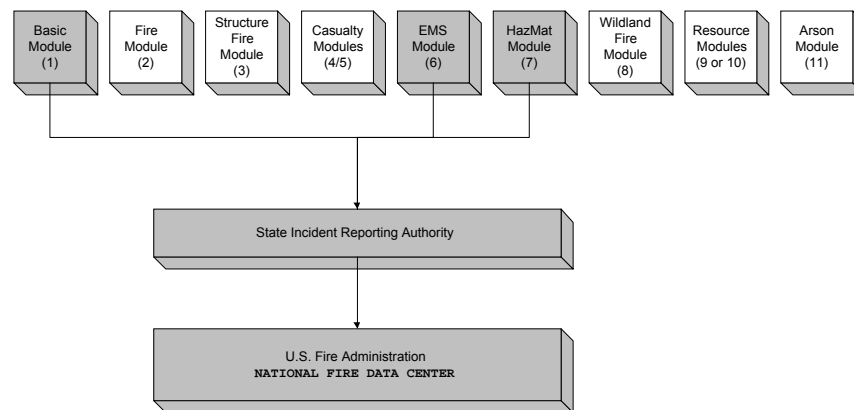
If multiple persons and entities are involved, the other resources modules could be completed.

The EMS Module may be used as an option. The identifier information, dates and times, age and gender, provider impression/assessment, race/ethnicity, injury description, cause of illness/injury, highest level of care, patient status and disposition should be completed.

Hazardous Materials (HazMat) Module (NFIRS-7)

The HazMat Module is used when the Basic Module indicates “other” for hazardous materials.

FIGURE 2-8. HazMat Module



NFIRS-7 includes information on:

- Materials identification
- Container information
- Release amounts and location
- Actions taken
- Mitigating factors

Hazardous materials incidents can be profiled in depth for management clarification and response strategy development.

An incident such as this example would be recorded using the Basic Module, Fire Module, and HazMat Module and possibly other Resource Modules.

Chemical Plant Fire

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the Basic Module.

The identifier, on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property sections would be completed on the Fire Module.

The building status, building size, main floor size, fire origin, fire spread, number of stories damaged by flame, presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason, presence of automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason sections would be completed for the Structure Module.

Either the resources section on the Basic Module, or the Apparatus or Personnel modules would be used. If casualties occurred then the appropriate casualty module would be completed. The EMS Module is an optional choice but the Civilian Fire Casualty Module is not required.

The identifier, HazMat ID, container type, physical state when released, released from, population density, actions taken, release resulted in, cause of release, factors contributing to release, mitigating factors and impediments, equipment involved in release and mobile property sections must be completed on the HazMat Module.

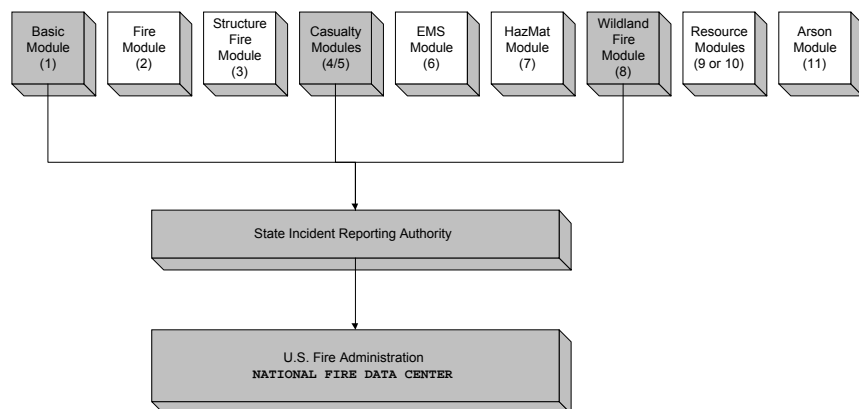
If multiple persons and entities were involved, the other Resources Modules would be used.

Wildland Module (NFIRS-8)

Wildland incidents of all sizes can be described in detail.

The Wildland Module is used when the incident type is vegetation and other outside fires.

FIGURE 2-9. Wildland Module



NFIRS-8 includes information on:

- Property details
- Fire cause
- Ignition information
- Fire suppression and management
- Mobile property type
- Equipment involved in ignition
- Weather data
- Fuel model at origin
- Total acres burned
- Property management
- Person responsible
- Fire behavior

In this example, a Basic Module would be completed, as well as the Wildland Fire Module instead of the Fire Module which is usually completed. A firefighter injury requires the completion of the Firefighter Casualty Module. The other Resources Modules and the EMS Module could be options for this incident as well.

Forest/Wildland Fire

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the Basic Module.

The identifier, alternate location (if the location on the basic form is not used), area type, fire cause, factors contributing to ignition, human factors contributing to ignition, suppression factors, equipment involved in ignition, mobile property type, weather information, number of buildings threatened and involved, fuel model at origin, acres and crops burned, the property management section, the person responsible section and the fire behavior section would be completed for the Wildland Module.

The appropriate Casualty Module would be completed. Either the resources section on the Basic Module or the Apparatus Module or Personnel Module would be used.

If multiple persons and entities are involved, the supplemental module could be used.

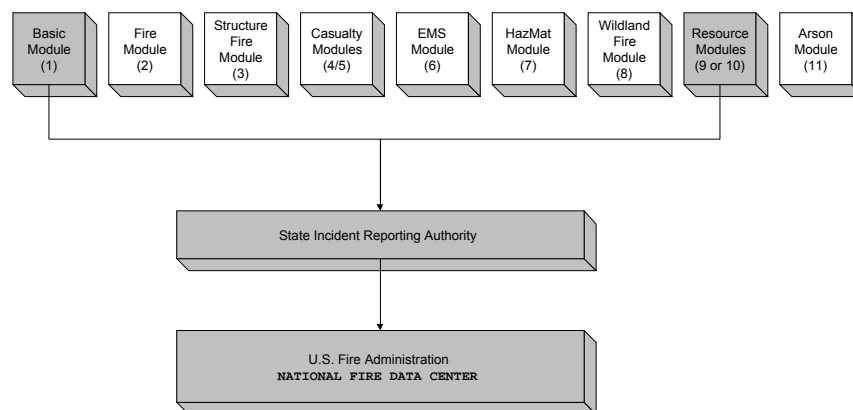
The EMS Module may be used as an option. The identifier information, dates and times, age and gender, provider impression/assessment, race/ethnicity, injury description, cause of illness/injury, highest level of care, patient status and disposition would be completed.

Apparatus Module (NFIRS-9)

The Apparatus Module is used as a local option to identify apparatus sent to each incident. If the Apparatus Module is used, the Basic Module must also be completed.

NOTE: When NFIRS Version 5.0 is implemented the local fire department must choose to use either the Apparatus Module or the Personnel Module depending on the level of detail needed by the department. The Personnel Module contains all data elements from the Apparatus Module plus additional data at the firefighter level.

FIGURE 2-10. Apparatus Module



NFIRS-9 includes information on:

- Apparatus identification and type
- Dispatch, arrival, clear dates and times
- Number of personnel
- Use
- Actions taken

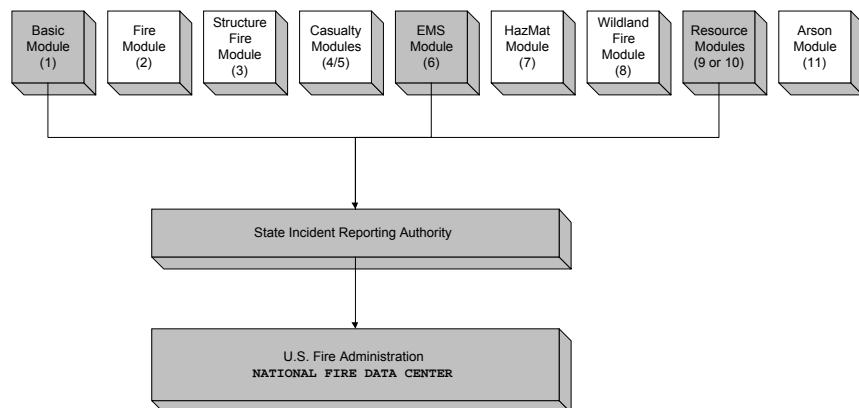
Personnel Module (NFIRS-10)

Modules profiling equipment and personnel provide administrators with data that can be used for management strategy development.

The Personnel Module is used as a local option to identify personnel sent to each incident. If the Personnel Module is used, the Basic Module must also be completed.

NOTE: When NFIRS Version 5.0 is implemented the local fire department must choose to use either the Apparatus Module or the Personnel Module depending on the level of detail needed by the department. The Personnel Module contains all data elements from the Apparatus Module plus additional data at the firefighter level.

FIGURE 2-11. Personnel Module

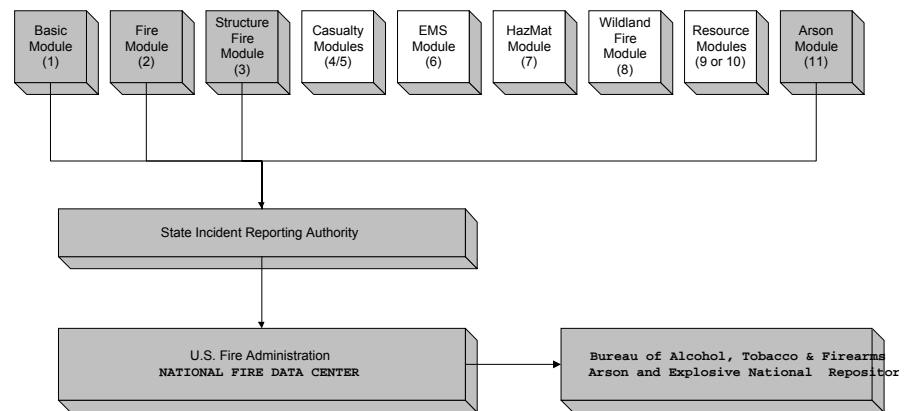


NFIRS – 10 includes information on:

- Apparatus identification and type
- Dispatch, arrival, clear dates and times
- Use
- Actions taken
- Personnel ID, rank, actions taken

Arson Module (NFIRS-11)

The Arson Module is optional and when used in conjunction with the Basic, Fire, and/or Structure Fire Modules allows departments to collect information about intentionally set fires. NFIRS-11 is designed to collect standardized information and interface directly with the Bureau of Alcohol, Tobacco, and Firearms' Arson and Explosives National Repository.

FIGURE 2-12. Arson Module

The NFIRS-11 includes information on:

- Agency investigating the incident
- Case status
- Suspected motivation factors
- Entry methods, devices, other information
- Property ownership,
- Laboratory used

Technical Documentation

System Architecture

The NFIRS 5.0 system is implemented as a distributed client-server system using “state-of-the-art” technologies. The system architecture has been specifically designed to provide flexibility for the implementation of the NFIRS 5.0 system.

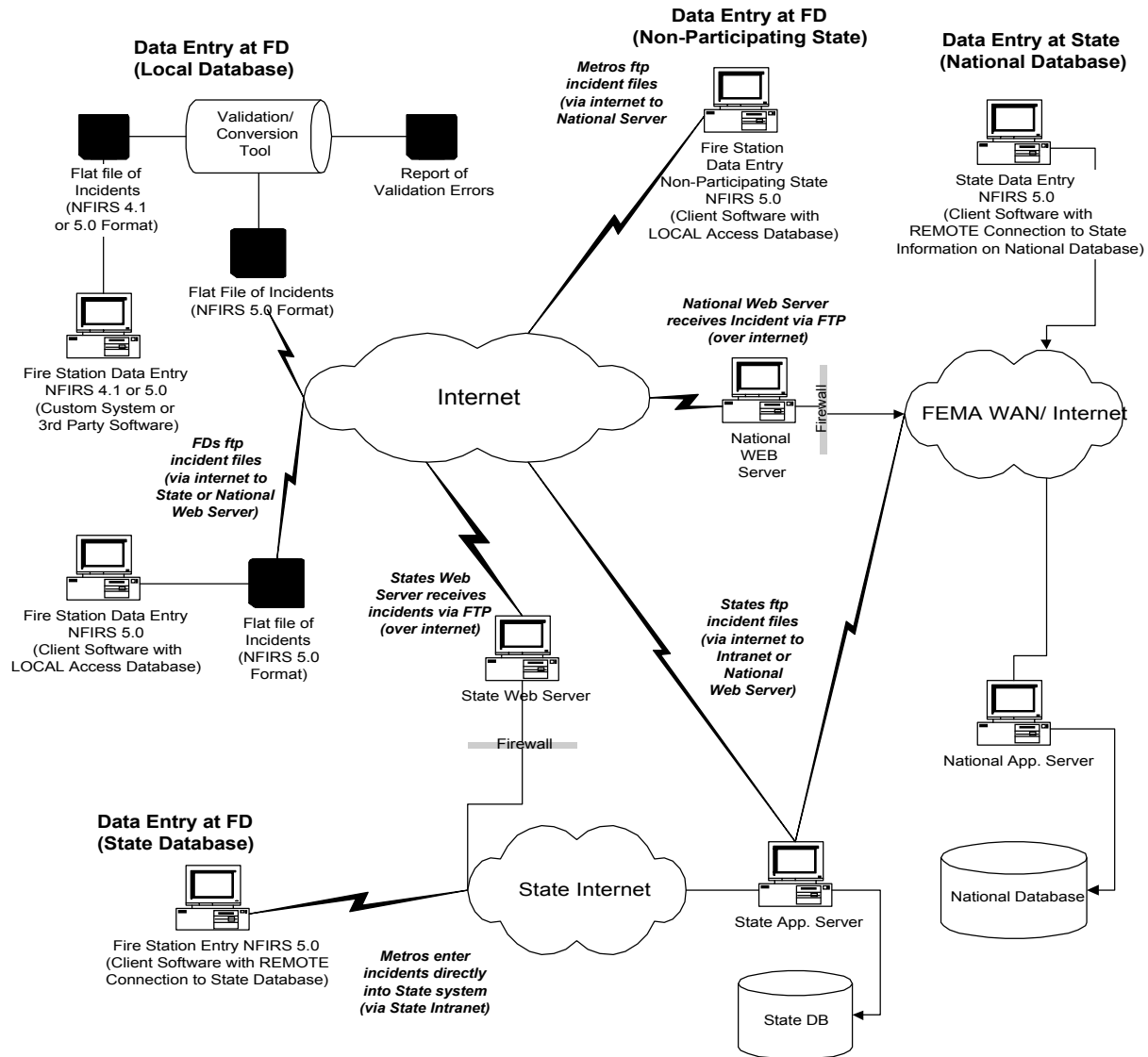
At the core of the NFIRS 5.0 system is a national database server and server software that resides on the FEMA WAN. Incident data stored in the NFIRS 5.0 system is organized by state and identified as a valid incident through the tools provided by the USFA. States are required to ‘release’ valid incidents that are available for general use. Some states may prefer to store all their incident data on a local database. In this case they have the option to upload only the valid incidents to the National database server and ‘release’ those valid incidents that are available for general use.

Depending on how a state chooses to implement the NFIRS 5.0 system, the components of the system required and the options available for those components will vary. The main differentiating factors between the scenarios surround where the data is stored and where incident data entry takes place. For discussion of the options available to the state, See “System Implementation Guidelines” on page 327.

Figure 3-1 on page 24 depicts some of the inbound incident collection connectivity options available to states and local users.

FIGURE 3-1. NFIRS 5.0 System Information Flow

NFIRS 5.0 System Information Flow Diagram



System Modules

The new system is modular in design and only requires the modules necessary to describe a particular incident. Data is collected on *all incidents* in a basic module with additional modules employed to further profile fires, structure fires, civilian fire casualties, fire service casualties, EMS incidents, hazardous material incidents, fires, apparatus, personnel deployment and arson fires.

The following is a brief description of each module used in the NFIRS Version 5.0.

The **Basic Module (NFIRS-1)** is used to describe every incident (or emergency call) to which your fire department responds. The Basic Module should be filled out for *every incident to which the department responds*. A sample of the Basic form is shown in Figure 3-2 on page 27.

The **Fire Module (NFIRS-2)** is used to describe each *fire* incident to which your fire department responds and must be used in conjunction with the Basic Module (NFIRS-1). For wildland fire incidents, the Wildland Fire Module (NFIRS-8) can be used instead of the Fire Module if that option is selected for use by your state or local reporting system administrator. A sample of the Fire form is shown in Figure 3-4 on page 29.

The **Structure Fire Module (NFIRS-3)** is used to describe each *structure fire* to which your fire department responds. This module must be used in conjunction with the Basic Module (NFIRS-1) and the Fire Module (NFIRS-2). When reporting using the paper forms, NFIRS-3 is generally printed on the back of the NFIRS-2 Fire form. A sample of the Structure Fire form is shown in Figure 3-5 on page 30.

The **Civilian Fire Casualty Module (NFIRS-4)** is used to report injuries or deaths to civilians or other emergency personnel (such as police officers or non-fire department EMS personnel) that occur in conjunction with a fire incident. The Civilian Fire Casualty Module must be used in conjunction with the Basic Module, the Fire Module, and if applicable the Structure Fire Module. NFIRS-4 is specifically designed for reporting injuries and fatalities caused by, or related to, a fire. To report non-fire related injuries to civilians the EMS Module (NFIRS-6) can be used. A sample of the Civilian Fire Casualty form is shown in Figure 3-6 on page 31.

The **Fire Service Casualty Module (NFIRS-5)** is used to report injuries or the deaths to firefighters. The module can also be used to report the exposure of a fire fighter to chemicals or biological agents at an incident where that exposure does not result in any symptoms at that time but where that exposure or accumulated exposures could lead to an illness at a later date. This module must be used in conjunction with the Basic Module and may be used with any of the other modules. A sample of the Fire Service Casualty form is shown in Figure 3-7 on page 32, and Figure 3-8 on page 33.

The **EMS Module (NFIRS-6)** is an optional module that can be used by those fire departments that provide emergency medical services to their community. It should be used only when the EMS Module option is selected by your state or local reporting system administrator. The module is used to report all medical incidents where the fire department provided the primary patient care. This includes incidents where there were civilian fire-related injuries and a Civilian Fire Casualty Module was completed, and where there were fire fighter injuries and a Fire Service Casualty Module was completed. *Note* – This is not a patient care record, but should be used in conjunction with the local requirements for patient care. This module can be used in conjunction with the Basic Module (NFIRS-1). A sample of the EMS form is shown in Figure 3-9 on page 34.

The **Hazardous Materials Module (NFIRS-7)** is an optional module used to report major spills or releases involving hazardous materials. It should be used only when the Hazardous Materials Module option is selected by your state or local reporting system administrator. This module is designed to be used in conjunction with the Basic Module (NFIRS-1) and, if appropriate, the Fire Module (NFIRS-2) or other modules to provide detailed information about incidents involving hazardous materials. A sample of the Hazardous Materials form is shown in Figure 3-10 on page 35.

The **Wildland Fire Module (NFIRS-8)** is an optional module used to report incidents that involve wildland or vegetation fires. It should be used only when the Wildland Fire Module option is selected by your state or local reporting system administrator. This module must be used in conjunction with the Basic Module (NFIRS-1) and replaces the Fire Module (NFIRS-2) for wildland fire incidents. A sample of the Wildland Fire form is shown in Figure 3-11 on page 36.

The **Apparatus Module (NFIRS-9)** and **Personnel Module (NFIRS-10)** are optional *department use* modules used to report detailed information on the apparatus and personnel that respond to the incident. They should be used only when the Apparatus or the Personnel Module option is selected by your state or local reporting system administrator. The Apparatus Module (NFIRS-9) is used to report data specific to each piece of apparatus that responds to the incident. It includes data that can be used to calculate response time and time out of service. The Personnel Module (NFIRS-10) is used to report the same data on a piece of apparatus but also provides for tracking the personnel associated with that apparatus. These optional modules can be used in conjunction with the Basic Module (NFIRS-1) for any type of incident. A sample of the Apparatus form is shown in Figure 3-12 on page 37, and the Personnel form appears in Figure 3-13 on page 38.

The **Arson Module (NFIRS-11)** is an optional module used to report additional information on fires that have been coded by the department as intentionally set. It should be used only when the Arson Module option is selected by your state or local reporting system administrator. This module collects general information on an arson incident, which is then sent to the National Fire Data Center. A sample of the Arson form is shown in Figure 3-14 on page 39, and Figure 3-15 on page 40.

The **Supplemental Module (NFIRS-1S)** is an optional module used to report detailed information on additional persons or entities involved in the incident. It adds flexibility to any incident report by expanding the data capability. A sample of the Supplemental form is shown in Figure 3-16 on page 41, and Figure 3-17 on page 42.

A complete set of forms can be downloaded from the USFA Web site at the following URL:

<http://www.usfa.fema.gov/newnfirs/>

FIGURE 3-2. NFIRS-1 Basic Form

A FDID <input type="text"/> State <input type="text"/> Incident Date <input type="text"/> MM <input type="text"/> DD <input type="text"/> YYYY <input type="text"/> Station <input type="text"/> Incident Number <input type="text"/> Exposure <input type="text"/>				<input type="checkbox"/> Delete <input type="checkbox"/> Change <input type="checkbox"/> No Activity		NFIRS - 1 Basic	
B Location <input type="checkbox"/> Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B "Alternative Location Specification". Use only for Wildland fires.							
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <input type="checkbox"/> Street address <input type="checkbox"/> Intersection <input type="checkbox"/> In front of <input type="checkbox"/> Rear of <input type="checkbox"/> Adjacent to <input type="checkbox"/> Directions </div> <div style="width: 35%;"> Number/Milepost <input type="text"/> Prefix <input type="text"/> Street or Highway <input type="text"/> Street Type <input type="text"/> Suffix <input type="text"/> Apt./Suite/Room <input type="text"/> City <input type="text"/> State <input type="text"/> Zip Code <input type="text"/> </div> </div>							
Cross street or directions, as applicable <input type="text"/>							
C Incident Type <input type="text"/> Incident Type <input type="text"/>		E1 Dates & Times Month <input type="text"/> Day <input type="text"/> Year <input type="text"/> Hour <input type="text"/> Min <input type="text"/>			E2 Shifts & Alarms Local Option <input type="text"/> Shift or platoon <input type="text"/> Alarms <input type="text"/> District <input type="text"/>		
D Aid Given or Received		Alarm <input type="checkbox"/> Arrival <input type="checkbox"/> Controlled <input type="checkbox"/> Last Unit Cleared <input type="checkbox"/>			E3 Special Studies Local Option <input type="text"/> Special Study ID# <input type="text"/> Special Study Value <input type="text"/>		
1 <input type="checkbox"/> Mutual aid received 2 <input type="checkbox"/> Automatic aid received 3 <input type="checkbox"/> Mutual aid given 4 <input type="checkbox"/> Automatic aid given 5 <input type="checkbox"/> Other aid given N <input type="checkbox"/> None		Check boxes if dates are the same as Alarm Date. ARRIVAL required, unless canceled or did not arrive CONTROLLED optional, except for wildland fires LAST UNIT CLEARED, required except for wildland fires			Their FDID <input type="text"/> Their State <input type="text"/> Their Incident Number <input type="text"/>		
F Actions Taken		G1 Resources			G2 Estimated Dollar Losses & Values		
Primary Action Taken (1) <input type="text"/> Additional Action Taken (2) <input type="text"/> Additional Action Taken (3) <input type="text"/>		<input type="checkbox"/> Check this box and skip this section if an Apparatus or Personnel form is used. Apparatus <input type="text"/> Personnel <input type="text"/> Suppression <input type="text"/> EMS <input type="text"/> Other <input type="text"/>			LOSSES: Required for all fires if known. Optional for non fires Property \$ <input type="text"/> , <input type="text"/> , <input type="text"/> <input type="checkbox"/> Contents \$ <input type="text"/> , <input type="text"/> , <input type="text"/> <input type="checkbox"/> PRE-INCIDENT VALUE Optional Property \$ <input type="text"/> , <input type="text"/> , <input type="text"/> <input type="checkbox"/> Contents \$ <input type="text"/> , <input type="text"/> , <input type="text"/> <input type="checkbox"/>		
Completed Modules		H1 Casualties			H3 Hazardous Materials Release		
<input type="checkbox"/> Fire-2 <input type="checkbox"/> Structure-3 <input type="checkbox"/> Civilian Fire Cas.-4 <input type="checkbox"/> Fire Serv. Casualty-5 <input type="checkbox"/> EMS-6 <input type="checkbox"/> HazMat-7 <input type="checkbox"/> Wildland Fire-8 <input type="checkbox"/> Apparatus-9 <input type="checkbox"/> Personnel-10 <input type="checkbox"/> Arson-11		Deaths <input type="text"/> Injuries <input type="text"/> Fire Service <input type="text"/> Civilian <input type="text"/> H2 Detector Required for confined fires. <input type="checkbox"/> Detector alerted occupants <input type="checkbox"/> Detector did not alert them <input type="checkbox"/> Unknown			<input type="checkbox"/> None <input type="checkbox"/> Natural gas: slow leak, no evacuation or HazMat actions <input type="checkbox"/> Propane gas: <21 lb. tank (as in home BBQ grill) <input type="checkbox"/> Gasoline: vehicle fuel tank or portable container <input type="checkbox"/> Kerosene: fuel burning equipment or portable storage <input type="checkbox"/> Diesel fuel/fuel oil: vehicle fuel tank or portable storage <input type="checkbox"/> Household solvents: home/office spill, cleanup only <input type="checkbox"/> Motor oil: from engine or portable container <input type="checkbox"/> Paint: from paint cans totaling <55 gallons <input type="checkbox"/> Other: Special HazMat actions required or spill > 55 gal., Please complete the HazMat form		
I Mixed Use Property		J Property Use Structures			Household goods, sales, repairs		
<input type="checkbox"/> Not mixed <input type="checkbox"/> Assembly Use <input type="checkbox"/> Education use <input type="checkbox"/> Medical use <input type="checkbox"/> Residential use <input type="checkbox"/> Row of stores <input type="checkbox"/> Enclosed mall <input type="checkbox"/> Business & residential <input type="checkbox"/> Office use <input type="checkbox"/> Industrial use <input type="checkbox"/> Military use <input type="checkbox"/> Farm use <input type="checkbox"/> Other mixed use		131 <input type="checkbox"/> Church, place of worship 161 <input type="checkbox"/> Restaurant or cafeteria 162 <input type="checkbox"/> Bar/tavern or nightclub 213 <input type="checkbox"/> Elementary school or kindergarten 215 <input type="checkbox"/> High school or junior high 241 <input type="checkbox"/> College, adult ed. 311 <input type="checkbox"/> Care facility for the aged 331 <input type="checkbox"/> Hospital Outside 124 <input type="checkbox"/> Playground or park 655 <input type="checkbox"/> Crops or orchard 669 <input type="checkbox"/> Forest (timberland) 807 <input type="checkbox"/> Outdoor storage area 919 <input type="checkbox"/> Dump or sanitary landfill 931 <input type="checkbox"/> Open land or field			341 <input type="checkbox"/> Clinic, clinic type infirmary 342 <input type="checkbox"/> Doctor/dentist office 361 <input type="checkbox"/> Prison or jail, not juvenile 419 <input type="checkbox"/> 1- or 2- family dwelling 429 <input type="checkbox"/> Multi-family dwelling 439 <input type="checkbox"/> Rooming/boarding house 449 <input type="checkbox"/> Commercial hotel or motel 459 <input type="checkbox"/> Residential, board and care 464 <input type="checkbox"/> Dormitory/barracks 519 <input type="checkbox"/> Food and beverage sales 936 <input type="checkbox"/> Vacant lot 938 <input type="checkbox"/> Graded/cared for plot of land 946 <input type="checkbox"/> Lake, river, stream 951 <input type="checkbox"/> Railroad right of way 960 <input type="checkbox"/> Other street 961 <input type="checkbox"/> Highway/divided highway 962 <input type="checkbox"/> Residential street/driveway		
539 <input type="checkbox"/> Household goods, sales, repairs 579 <input type="checkbox"/> Motor vehicle/boat sales/repairs 571 <input type="checkbox"/> Gas or service station 599 <input type="checkbox"/> Business office 615 <input type="checkbox"/> Electric generating plant 629 <input type="checkbox"/> Laboratory/science lab 700 <input type="checkbox"/> Manufacturing plant 819 <input type="checkbox"/> Livestock/poultry storage (barn) 882 <input type="checkbox"/> Non-residential parking garage 891 <input type="checkbox"/> Warehouse 981 <input type="checkbox"/> Construction site 984 <input type="checkbox"/> Industrial plant yard		Look up and enter a Property Use code only if you have NOT checked a Property Use box: <input type="text"/>			Property Use <input type="text"/>		

NFIRS-1 Revision 03/11/99

FIGURE 3-3. NFIRS-1 Basic Form (side 2)

K1 Person/Entity Involved																										
<input type="checkbox"/> Local Option	Business name (if applicable) _____ <div style="float: right; text-align: right;"> Area Code _____ Phone Number _____ </div>																									
<input type="checkbox"/> Check this box if same address as incident location. Then skip the three duplicate address lines.	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Mr., Ms., Mrs.</td> <td style="width: 35%;">First Name _____</td> <td style="width: 5%;">MI _____</td> <td style="width: 30%;">Last Name _____</td> <td style="width: 15%;">Suffix _____</td> </tr> <tr> <td>Number _____</td> <td>Prefix _____</td> <td colspan="2">Street or Highway _____</td> <td>Street Type _____</td> </tr> <tr> <td colspan="2">Post Office Box _____</td> <td colspan="3">Apt./Suite/Room _____</td> </tr> <tr> <td colspan="2">City _____</td> <td colspan="3"></td> </tr> <tr> <td>State _____</td> <td>Zip Code _____</td> <td colspan="3"></td> </tr> </table>	Mr., Ms., Mrs.	First Name _____	MI _____	Last Name _____	Suffix _____	Number _____	Prefix _____	Street or Highway _____		Street Type _____	Post Office Box _____		Apt./Suite/Room _____			City _____					State _____	Zip Code _____			
Mr., Ms., Mrs.	First Name _____	MI _____	Last Name _____	Suffix _____																						
Number _____	Prefix _____	Street or Highway _____		Street Type _____																						
Post Office Box _____		Apt./Suite/Room _____																								
City _____																										
State _____	Zip Code _____																									
<input type="checkbox"/> More people involved? Check this box and attach Supplemental Forms (NFIRS-1S) as necessary.																										
K2 Owner																										
<input type="checkbox"/> Local Option	<input type="checkbox"/> Same as person involved? Then check this box and skip the rest of this section. <div style="float: right; text-align: right;"> Business name (if applicable) _____ Area Code _____ Phone Number _____ </div>																									
<input type="checkbox"/> Check this box if same address as incident location. Then skip the three duplicate address lines.	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Mr., Ms., Mrs.</td> <td style="width: 35%;">First Name _____</td> <td style="width: 5%;">MI _____</td> <td style="width: 30%;">Last Name _____</td> <td style="width: 15%;">Suffix _____</td> </tr> <tr> <td>Number _____</td> <td>Prefix _____</td> <td colspan="2">Street or Highway _____</td> <td>Street Type _____</td> </tr> <tr> <td colspan="2">Post Office Box _____</td> <td colspan="3">Apt./Suite/Room _____</td> </tr> <tr> <td colspan="2">City _____</td> <td colspan="3"></td> </tr> <tr> <td>State _____</td> <td>Zip Code _____</td> <td colspan="3"></td> </tr> </table>	Mr., Ms., Mrs.	First Name _____	MI _____	Last Name _____	Suffix _____	Number _____	Prefix _____	Street or Highway _____		Street Type _____	Post Office Box _____		Apt./Suite/Room _____			City _____					State _____	Zip Code _____			
Mr., Ms., Mrs.	First Name _____	MI _____	Last Name _____	Suffix _____																						
Number _____	Prefix _____	Street or Highway _____		Street Type _____																						
Post Office Box _____		Apt./Suite/Room _____																								
City _____																										
State _____	Zip Code _____																									
<div style="border: 1px solid black; padding: 5px; width: 150px; float: left;"> L Remarks: Local Option </div> <div style="clear: both;"></div>																										
<div style="float: right; border: 1px solid black; padding: 5px; width: 300px;"> Fire Module Required? Check the box that applies and then complete the additional Fire mod. based on Incident Type as follows: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Buildings 111 <input type="checkbox"/> Special structure 112 <input type="checkbox"/> Confined 113-118 <input type="checkbox"/> Mobile Property 120-123 <input type="checkbox"/> Vehicle 130-138 <input type="checkbox"/> Vegetation 140-143 <input type="checkbox"/> Outside rubbish fire 150-155 <input type="checkbox"/> Special outside fire 160-164 <input type="checkbox"/> Crop fire 170-173 </td> <td style="width: 50%; vertical-align: top;"> Complete Fire & Structure Complete Fire Mod. & the 1 block on Structure Module Complete Basic Module Complete Fire Module Complete Fire or Wildland Complete Basic Module Complete Fire Module Complete Fire Module </td> </tr> </table> </div> <div style="clear: both;"></div>		<input type="checkbox"/> Buildings 111 <input type="checkbox"/> Special structure 112 <input type="checkbox"/> Confined 113-118 <input type="checkbox"/> Mobile Property 120-123 <input type="checkbox"/> Vehicle 130-138 <input type="checkbox"/> Vegetation 140-143 <input type="checkbox"/> Outside rubbish fire 150-155 <input type="checkbox"/> Special outside fire 160-164 <input type="checkbox"/> Crop fire 170-173	Complete Fire & Structure Complete Fire Mod. & the 1 block on Structure Module Complete Basic Module Complete Fire Module Complete Fire or Wildland Complete Basic Module Complete Fire Module Complete Fire Module																							
<input type="checkbox"/> Buildings 111 <input type="checkbox"/> Special structure 112 <input type="checkbox"/> Confined 113-118 <input type="checkbox"/> Mobile Property 120-123 <input type="checkbox"/> Vehicle 130-138 <input type="checkbox"/> Vegetation 140-143 <input type="checkbox"/> Outside rubbish fire 150-155 <input type="checkbox"/> Special outside fire 160-164 <input type="checkbox"/> Crop fire 170-173	Complete Fire & Structure Complete Fire Mod. & the 1 block on Structure Module Complete Basic Module Complete Fire Module Complete Fire or Wildland Complete Basic Module Complete Fire Module Complete Fire Module																									
<div style="display: flex; align-items: center;"> <div> ITEMS WITH A ★ MUST ALWAYS BE COMPLETED! </div> </div>																										
<input type="checkbox"/> More remarks? Check this box and attach Supplemental Forms (NFIRS-1S) as necessary.																										
M Authorization																										
<input type="checkbox"/> Check box if same as Officer in charge.	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Officer in charge ID _____</td> <td style="width: 20%;">Signature _____</td> <td style="width: 20%;">Position or rank _____</td> <td style="width: 20%;">Assignment _____</td> <td style="width: 10%;">Month _____</td> <td style="width: 10%;">Day _____</td> <td style="width: 10%;">Year _____</td> </tr> <tr> <td>Member making report ID _____</td> <td>Signature _____</td> <td>Position or rank _____</td> <td>Assignment _____</td> <td>Month _____</td> <td>Day _____</td> <td>Year _____</td> </tr> </table>	Officer in charge ID _____	Signature _____	Position or rank _____	Assignment _____	Month _____	Day _____	Year _____	Member making report ID _____	Signature _____	Position or rank _____	Assignment _____	Month _____	Day _____	Year _____											
Officer in charge ID _____	Signature _____	Position or rank _____	Assignment _____	Month _____	Day _____	Year _____																				
Member making report ID _____	Signature _____	Position or rank _____	Assignment _____	Month _____	Day _____	Year _____																				

FIGURE 3-4. NFIRS-2 Fire Form

Complete this side for all fires			
A <div style="display: flex; justify-content: space-between;"> <div>FDID <input style="width: 40px;" type="text"/></div> <div>State <input style="width: 40px;" type="text"/></div> <div>Incident Date <input style="width: 40px;" type="text"/>MM <input style="width: 40px;" type="text"/>DD <input style="width: 40px;" type="text"/>YYYY</div> <div>Station <input style="width: 40px;" type="text"/></div> <div>Incident Number <input style="width: 40px;" type="text"/></div> <div>Exposure <input style="width: 40px;" type="text"/></div> </div>	<input type="checkbox"/> Delete <input type="checkbox"/> Change <div style="border: 1px solid black; padding: 2px; display: inline-block;">NFIRS - 2 Fire</div>		
B Property Details B1 <input style="width: 40px;" type="text"/> <input type="checkbox"/> Not Residential <small>Estimated number of residential living units in building of origin <i>whether or not all units became involved</i></small> B2 <input style="width: 40px;" type="text"/> <input type="checkbox"/> Buildings not involved <small>Number of buildings involved</small> B3 <input style="width: 40px;" type="text"/> <input type="checkbox"/> None <small>Acres burned (outside fires)</small> <input type="checkbox"/> Less than one acre	C On-Site Materials or Products <input type="checkbox"/> None <small>Enter up to three codes. Check one box for each code entered.</small> <div style="display: flex;"> <div style="flex: 1;"> On-site material (1) <input style="width: 40px;" type="text"/> On-site material (2) <input style="width: 40px;" type="text"/> On-site material (3) <input style="width: 40px;" type="text"/> </div> <div style="flex: 1;"> 1 <input type="checkbox"/> Bulk storage or warehousing 2 <input type="checkbox"/> Processing or manufacturing 3 <input type="checkbox"/> Packaged goods for sale 4 <input type="checkbox"/> Repair or service 1 <input type="checkbox"/> Bulk storage or warehousing 2 <input type="checkbox"/> Processing or manufacturing 3 <input type="checkbox"/> Packaged goods for sale 4 <input type="checkbox"/> Repair or service 1 <input type="checkbox"/> Bulk storage or warehousing 2 <input type="checkbox"/> Processing or manufacturing 3 <input type="checkbox"/> Packaged goods for sale 4 <input type="checkbox"/> Repair or service </div> </div>		
D Ignition D1 <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Area of fire origin</small> D2 <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Heat source</small> D3 <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input type="checkbox"/> Check box if fire spread was confined to object of origin <small>Item first ignited</small> D4 <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Type of material first ignited</small> <small>Required only if item first ignited code is 00 or <70</small>	E1 Cause of Ignition <input style="width: 40px;" type="text"/> <input type="checkbox"/> Check box if this is an exposure report. ➡ Skip to Section G 1 <input type="checkbox"/> Intentional 2 <input type="checkbox"/> Unintentional 3 <input type="checkbox"/> Failure of equipment or heat source 4 <input type="checkbox"/> Act of nature 5 <input type="checkbox"/> Cause under investigation U <input type="checkbox"/> Cause undetermined after investigation E2 Factors Contributing To Ignition <input type="checkbox"/> None <div style="display: flex;"> <div style="flex: 1;"> Factor contributing to ignition (1) <input style="width: 40px;" type="text"/> Factor contributing to ignition (2) <input style="width: 40px;" type="text"/> </div> <div style="flex: 1;"> E3 Human Factors Contributing To Ignition <small>Check all applicable boxes</small> <input type="checkbox"/> None 1 <input type="checkbox"/> Asleep 2 <input type="checkbox"/> Possibly impaired by alcohol or drugs 3 <input type="checkbox"/> Unattended person 4 <input type="checkbox"/> Possibly mentally disabled 5 <input type="checkbox"/> Physically disabled 6 <input type="checkbox"/> Multiple persons involved 7 <input type="checkbox"/> Age was a factor Estimated age of person involved <input style="width: 40px;" type="text"/> 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female </div> </div>		
F1 Equipment Involved In Ignition <input type="checkbox"/> None ➡ If equipment was not involved, skip to Section G <input style="width: 40px;" type="text"/> <small>Equipment Involved</small> Brand <input style="width: 40px;" type="text"/> Model <input style="width: 40px;" type="text"/> Serial # <input style="width: 40px;" type="text"/> Year <input style="width: 40px;" type="text"/>	F2 Equipment Power <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Equipment Power Source</small> F3 Equipment Portability 1 <input type="checkbox"/> Portable 2 <input type="checkbox"/> Stationary <small>Portable equipment normally can be moved by one person, is designed to be used in multiple locations, and requires no tools to install.</small>	G Fire Suppression Factors <small>Enter up to three codes.</small> <input type="checkbox"/> None <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Fire suppression factor (1)</small> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Fire suppression factor (2)</small> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Fire suppression factor (3)</small>	
H1 Mobile Property Involved <input type="checkbox"/> None 1 <input type="checkbox"/> Not involved in ignition, but burned 2 <input type="checkbox"/> Involved in ignition, but did not burn 3 <input type="checkbox"/> Involved in ignition and burned <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Mobile property model <input style="width: 40px;" type="text"/> License Plate Number <input style="width: 40px;" type="text"/> State <input style="width: 40px;" type="text"/> VIN Number <input style="width: 40px;" type="text"/> Year <input style="width: 40px;" type="text"/> </div>	H2 Mobile Property Type & Make <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Mobile property type</small> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>Mobile property make</small> Year <input style="width: 40px;" type="text"/>		
Structure fire? Please be sure to complete the other side of this form.			
<small>NFIRS-2 Revision 01/19/99</small>			

FIGURE 3-5. NFIRS-3 Structure Fire Form

I1 Structure Type ☆ If fire was in an enclosed building or a portable/mobile structure complete the rest of this form 1 <input type="checkbox"/> Enclosed building 2 <input type="checkbox"/> Portable/mobile structure 3 <input type="checkbox"/> Open structure 4 <input type="checkbox"/> Air supported structure 5 <input type="checkbox"/> Tent 6 <input type="checkbox"/> Open platform (e.g. piers) 7 <input type="checkbox"/> Underground structure (work areas) 8 <input type="checkbox"/> Connective structure (e.g. fence) 0 <input type="checkbox"/> Other type of structure	I2 Building Status ☆ 1 <input type="checkbox"/> Under construction 2 <input type="checkbox"/> Occupied & operating 3 <input type="checkbox"/> Idle, not routinely used 4 <input type="checkbox"/> Under major renovation 5 <input type="checkbox"/> Vacant and secured 6 <input type="checkbox"/> Vacant and unsecured 7 <input type="checkbox"/> Being demolished 0 <input type="checkbox"/> Other U <input type="checkbox"/> Undetermined	I3 Building Height ☆ Count the ROOF as part of the highest story _____ Total number of stories at or above grade _____ Total number of stories below grade	I4 Main Floor Size ☆ _____, _____, _____ Total square feet OR _____ BY _____ Length in feet Width in feet
J1 Fire Origin ☆ _____ Story of fire origin <input type="checkbox"/> Below grade	J3 Number of Stories Damaged By Flame ☆ Count the ROOF as part of the highest story _____ Number of stories w/ minor damage (1 to 24% flame damage) _____ Number of stories w/ significant damage (25 to 49% flame damage) _____ Number of stories w/ heavy damage (50 to 74% flame damage) _____ Number of stories w/ extreme damage (75 to 100% flame damage) _____	K Material Contributing Most To Flame Spread <input type="checkbox"/> Check if no flame spread <input type="checkbox"/> OR same as material first ignited <input type="checkbox"/> OR unable to determine Skip to Section L K1 _____ Item contributing most to flame spread K2 _____ Type of material contributing most to flame spread Required only if item contributing code is 00 or <70.	
J2 Fire Spread ☆ 2 <input type="checkbox"/> Confined to room of origin 3 <input type="checkbox"/> Confined to floor of origin 4 <input type="checkbox"/> Confined to building of origin 5 <input type="checkbox"/> Beyond building of origin	L1 Presence of Detectors ☆ (In area of the fire) N <input type="checkbox"/> None Present → Skip to section M 1 <input type="checkbox"/> Present U <input type="checkbox"/> Undetermined	L3 Detector Power Supply 1 <input type="checkbox"/> Battery only 2 <input type="checkbox"/> Hardwire only 3 <input type="checkbox"/> Plug in 4 <input type="checkbox"/> Hardwire with battery 5 <input type="checkbox"/> Plug in with battery 6 <input type="checkbox"/> Mechanical 7 <input type="checkbox"/> Multiple detectors & power supplies 0 <input type="checkbox"/> Other _____ U <input type="checkbox"/> Undetermined	L5 Detector Effectiveness Required if detector operated. 1 <input type="checkbox"/> Alerted occupants, occupants responded 2 <input type="checkbox"/> Occupants failed to respond 3 <input type="checkbox"/> There were no occupants 4 <input type="checkbox"/> Failed to alert occupants U <input type="checkbox"/> Undetermined
L2 Detector Type 1 <input type="checkbox"/> Smoke 2 <input type="checkbox"/> Heat 3 <input type="checkbox"/> Combination smoke - heat 4 <input type="checkbox"/> Sprinkler, water flow detection 5 <input type="checkbox"/> More than 1 type present 0 <input type="checkbox"/> Other _____ U <input type="checkbox"/> Undetermined	L4 Detector Operation 1 <input type="checkbox"/> Fire too small to activate 2 <input type="checkbox"/> Operated → Complete Section L5 3 <input type="checkbox"/> Failed to operate → Complete Section L6 U <input type="checkbox"/> Undetermined	L6 Detector Failure Reason Required if detector failed to operate 1 <input type="checkbox"/> Power failure, shutoff or disconnect 2 <input type="checkbox"/> Improper installation or placement 3 <input type="checkbox"/> Defective 4 <input type="checkbox"/> Lack of maintenance, includes cleaning 5 <input type="checkbox"/> Battery missing or disconnected 6 <input type="checkbox"/> Battery discharged or dead 0 <input type="checkbox"/> Other _____ U <input type="checkbox"/> Undetermined	
M1 Presence of Automatic Extinguishment System ☆ N <input type="checkbox"/> None Present → Complete rest of Section M 1 <input type="checkbox"/> Present	M2 Type of Automatic Extinguishment System Required if fire was within designed range of AES 1 <input type="checkbox"/> Wet pipe sprinkler 2 <input type="checkbox"/> Dry pipe sprinkler 3 <input type="checkbox"/> Other sprinkler system 4 <input type="checkbox"/> Dry chemical system 5 <input type="checkbox"/> Foam system 6 <input type="checkbox"/> Halogen type system 7 <input type="checkbox"/> Carbon dioxide (CO ₂) system 0 <input type="checkbox"/> Other special hazard system U <input type="checkbox"/> Undetermined	M3 Automatic Extinguishment System Operation Required if fire was within designed range 1 <input type="checkbox"/> Operated & effective (go to M4) 2 <input type="checkbox"/> Operated & not effective (M4) 3 <input type="checkbox"/> Fire too small to activate 4 <input type="checkbox"/> Failed to operate (go to M5) 0 <input type="checkbox"/> Other U <input type="checkbox"/> Undetermined	M5 Automatic Extinguishment System Failure Reason Required if system failed 1 <input type="checkbox"/> System shut off 2 <input type="checkbox"/> Not enough agent discharged 3 <input type="checkbox"/> Agent discharged but did not reach fire 4 <input type="checkbox"/> Wrong type of system 5 <input type="checkbox"/> Fire not in area protected 6 <input type="checkbox"/> System components damaged 7 <input type="checkbox"/> Lack of maintenance 8 <input type="checkbox"/> Manual intervention 0 <input type="checkbox"/> Other _____ U <input type="checkbox"/> Undetermined
M4 Number of Sprinkler Heads Operating Required if system operated _____ Number of sprinkler heads operating		NFIRS-3 Revision 01/19/99	

FIGURE 3-7. NFIRS-5 Fire Service Casualty Form

[illegible]

FIGURE 3-8. NFIRS-5 Fire Service Casualty Form (side 2)

K1 Did protective equipment fail and contribute to the injury? Please complete the remainder of this form ONLY if you answered YES.		Yes <input type="checkbox"/> Y No <input type="checkbox"/> N	Equipment Sequence Number 	NFIRS - 5 Fire Service Casualty
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K2 Protective Equipment Item <div style="margin-bottom: 10px;"> Head or Face Protection 11 <input type="checkbox"/> Helmet 12 <input type="checkbox"/> Full face protector 13 <input type="checkbox"/> Partial protector 14 <input type="checkbox"/> Goggles/eye protection 15 <input type="checkbox"/> Hood 16 <input type="checkbox"/> Ear protector 17 <input type="checkbox"/> Neck protector 18 <input type="checkbox"/> Other </div> <div style="margin-bottom: 10px;"> Coat, shirt, or trousers 21 <input type="checkbox"/> Protective coat 22 <input type="checkbox"/> Protective trousers 23 <input type="checkbox"/> Uniform shirt 24 <input type="checkbox"/> Uniform t-shirt 25 <input type="checkbox"/> Uniform trousers 26 <input type="checkbox"/> Uniform coat or jacket 27 <input type="checkbox"/> Overalls 28 <input type="checkbox"/> Apron or gown 29 <input type="checkbox"/> Other </div> <div style="margin-bottom: 10px;"> Boots or Shoes 31 <input type="checkbox"/> Knee length boots w/ steel baseplate & steel toes 32 <input type="checkbox"/> Knee length boots w/ steel toes only 33 <input type="checkbox"/> 3/4 length boots w/ steel baseplate & steel toes 34 <input type="checkbox"/> 3/4 length boots w/ steel toes only 35 <input type="checkbox"/> Boots without steel baseplate & steel toes 36 <input type="checkbox"/> Safety shoes w/ steel baseplate & steel toes 37 <input type="checkbox"/> Safety shoes w/ steel toes only 38 <input type="checkbox"/> Non-safety shoes 39 <input type="checkbox"/> Other </div> <div style="margin-bottom: 10px;"> Respiratory Protection 41 <input type="checkbox"/> SCBA (demand) open circuit 42 <input type="checkbox"/> SCBA (positive pressure) open circuit 43 <input type="checkbox"/> SCBA closed circuit 44 <input type="checkbox"/> Not self-contained 45 <input type="checkbox"/> Cartridge respirator 46 <input type="checkbox"/> Dust or particle mask 47 <input type="checkbox"/> Other </div> <div style="margin-bottom: 10px;"> Hand Protection 51 <input type="checkbox"/> Firefighter gloves w/ wristlets 52 <input type="checkbox"/> Firefighter gloves without wristlets 53 <input type="checkbox"/> Work gloves 54 <input type="checkbox"/> Hazmat gloves 55 <input type="checkbox"/> Medical gloves 56 <input type="checkbox"/> Other </div> <div> Special Equipment 61 <input type="checkbox"/> Proximity suit for entry 62 <input type="checkbox"/> Proximity suit for non-entry 63 <input type="checkbox"/> Totally encapsulated, reusable chemical suit 64 <input type="checkbox"/> Totally encapsulated, disposable chemical suit 65 <input type="checkbox"/> Partially encapsulated, reusable chemical suit 66 <input type="checkbox"/> Partially encapsulated, disposable chemical suit 67 <input type="checkbox"/> Flash protection suit 68 <input type="checkbox"/> Flight or jump suit 69 <input type="checkbox"/> Brush suit 70 <input type="checkbox"/> Exposure suit 71 <input type="checkbox"/> Self-contained underwater breathing apparatus (SCUBA) 72 <input type="checkbox"/> Life preserver 73 <input type="checkbox"/> Life belt or ladder belt 74 <input type="checkbox"/> Personal alert safety system (PASS) 75 <input type="checkbox"/> Radio distress device 76 <input type="checkbox"/> Personal lighting 77 <input type="checkbox"/> Fire shelter or tent 78 <input type="checkbox"/> Vehicle safety belt 79 <input type="checkbox"/> Other </div>	K3 Protective Equipment Problem Check one box to indicate the main problem that occurred. 11 <input type="checkbox"/> Burned 12 <input type="checkbox"/> Melted 21 <input type="checkbox"/> Fractured, cracked or broken 22 <input type="checkbox"/> Punctured 23 <input type="checkbox"/> Scratched 24 <input type="checkbox"/> Knocked off 25 <input type="checkbox"/> Cut or ripped 31 <input type="checkbox"/> Trapped steam or hazardous gas 32 <input type="checkbox"/> Insufficient insulation 33 <input type="checkbox"/> Object fell in or onto equipment item 41 <input type="checkbox"/> Failed under impact 42 <input type="checkbox"/> Face piece or hose detached 43 <input type="checkbox"/> Exhalation valve inoperative or damaged 44 <input type="checkbox"/> Harness detached or separated 45 <input type="checkbox"/> Regulator failed to operate 46 <input type="checkbox"/> Regulator damaged by contact 47 <input type="checkbox"/> Problem with admissions valve 48 <input type="checkbox"/> Alarm failed to operate 49 <input type="checkbox"/> Alarm damaged by contact 51 <input type="checkbox"/> Supply cylinder or valve failed to operate 52 <input type="checkbox"/> Supply cylinder/valve damaged by contact 53 <input type="checkbox"/> Supply cylinder— insufficient air/oxygen 94 <input type="checkbox"/> Did not fit properly 95 <input type="checkbox"/> Not properly serviced or stored prior to use 96 <input type="checkbox"/> Not used for designed purpose 97 <input type="checkbox"/> Not used as recommended by manufacturer 00 <input type="checkbox"/> Other equipment problem
---	---

K4 Equipment Manufacturer, Model & Serial Number <div style="border-bottom: 1px solid black; margin-bottom: 5px; padding-bottom: 2px;">Manufacturer</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; padding-bottom: 2px;">Model</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px; padding-bottom: 2px;">Serial Number</div>	<div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Was the failure of more than one item of protective equipment a factor in the injury? If so, complete an additional page of this form for each piece of failed equipment. </div>
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NFIRS-5 Revision 6/25/99

FIGURE 3-9. NFIRS-6 Emergency Medical Services (EMS) Form

A FDID <input type="checkbox"/> State <input type="checkbox"/> Incident Date <input type="checkbox"/> DD YYYY Station <input type="checkbox"/> Incident Number <input type="checkbox"/> Exposure <input type="checkbox"/>		<input type="checkbox"/> Delete <input type="checkbox"/> Change		NFIRS-6 EMS	
B Number of Patients <input type="text"/> Patient Number <input type="text"/>		C Date/Time Month <input type="text"/> Day <input type="text"/> Year <input type="text"/> Hour/Mins <input type="text"/>			
Use a separate form for each patient		<input type="checkbox"/> Time Arrived at Patient <input type="checkbox"/> Time of Patient Transfer			
D Provider Impression/Assessment <input type="checkbox"/> Check one box only					
10 <input type="checkbox"/> Abdominal pain 11 <input type="checkbox"/> Airway obstruction 12 <input type="checkbox"/> Allergic reaction 13 <input type="checkbox"/> Altered LOC 14 <input type="checkbox"/> Behavioral/psych 15 <input type="checkbox"/> Burns 16 <input type="checkbox"/> Cardiac arrest 17 <input type="checkbox"/> Cardiac dysrhythmia		18 <input type="checkbox"/> Chest pain 19 <input type="checkbox"/> Diabetic symptom 20 <input type="checkbox"/> Do not resuscitate 21 <input type="checkbox"/> Electrocutation 22 <input type="checkbox"/> General illness 23 <input type="checkbox"/> Hemorrhaging/bleeding 24 <input type="checkbox"/> Hyperthermia 25 <input type="checkbox"/> Hypothermia		26 <input type="checkbox"/> Hypovolemia 27 <input type="checkbox"/> Inhalation injury 28 <input type="checkbox"/> Obvious death 29 <input type="checkbox"/> OD/poisoning 30 <input type="checkbox"/> Pregnancy/OB 31 <input type="checkbox"/> Respiratory arrest 32 <input type="checkbox"/> Respiratory distress 33 <input type="checkbox"/> Seizure	
34 <input type="checkbox"/> Sexual assault 35 <input type="checkbox"/> Sting/bite 36 <input type="checkbox"/> Stroke/CVA 37 <input type="checkbox"/> Syncope 38 <input type="checkbox"/> Trauma 00 <input type="checkbox"/> Other NN <input type="checkbox"/> None/no patient or refused treatment					
E1 Age or Date of Birth Age <input type="text"/> <input type="checkbox"/> Months (for infants) OR Month <input type="text"/> Day <input type="text"/> Year <input type="text"/>		F1 Race 1 <input type="checkbox"/> White 2 <input type="checkbox"/> Black 3 <input type="checkbox"/> Am. Indian/Eskimo 4 <input type="checkbox"/> Asian 0 <input type="checkbox"/> Other, multi-racial U <input type="checkbox"/> Undetermined		G1 Human Factors Check all applicable boxes 1 <input type="checkbox"/> Asleep 2 <input type="checkbox"/> Unconscious 3 <input type="checkbox"/> Possibly impaired by alcohol 4 <input type="checkbox"/> Possibly impaired by drugs 5 <input type="checkbox"/> Possibly mentally disabled 6 <input type="checkbox"/> Physically disabled 7 <input type="checkbox"/> Physically restrained 8 <input type="checkbox"/> Unattended person N <input type="checkbox"/> None	
E2 Gender 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female		F2 Ethnicity 1 <input type="checkbox"/> Hispanic		G2 Other Factors If an illness, not an injury, skip G2 and go to H3 1 <input type="checkbox"/> Accidental 2 <input type="checkbox"/> Self-inflicted 3 <input type="checkbox"/> Inflicted, not self N <input type="checkbox"/> None	
H1 Body Site of Injury List up to five body sites <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		H2 Injury Type List one injury type for each body site listed under H1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		H3 Cause of Illness/Injury Cause of illness/injury <input type="text"/> <input type="text"/>	
I Procedures Used Check all applicable boxes 01 <input type="checkbox"/> Airway insertion 02 <input type="checkbox"/> Anti-shock trousers 03 <input type="checkbox"/> Assist ventilation 04 <input type="checkbox"/> Bleeding control 05 <input type="checkbox"/> Burn care 06 <input type="checkbox"/> Cardiac pacing 07 <input type="checkbox"/> Cardioversion (defib) manual 08 <input type="checkbox"/> Chest/abdominal thrust 09 <input type="checkbox"/> CPR 10 <input type="checkbox"/> Cricothyroidotomy 11 <input type="checkbox"/> Defibrillation by AED 12 <input type="checkbox"/> EKG monitoring 13 <input type="checkbox"/> Extrication 14 <input type="checkbox"/> Intubation (EGTA) 15 <input type="checkbox"/> Intubation (ET) 16 <input type="checkbox"/> IO/IV therapy 17 <input type="checkbox"/> Medications therapy 18 <input type="checkbox"/> Oxygen therapy 19 <input type="checkbox"/> OB care/delivery 20 <input type="checkbox"/> Prearrival instructions 21 <input type="checkbox"/> Restrain patient 22 <input type="checkbox"/> Spinal immobilization 23 <input type="checkbox"/> Splint extremities 24 <input type="checkbox"/> Suction/aspirate NN <input type="checkbox"/> No Treatment 00 <input type="checkbox"/> Other		J Safety Equipment Used or deployed by Patient 1 <input type="checkbox"/> Safety/seat belts 2 <input type="checkbox"/> Child safety seat 3 <input type="checkbox"/> Airbag 4 <input type="checkbox"/> Helmet 5 <input type="checkbox"/> Protective clothing 6 <input type="checkbox"/> Flotation device N <input type="checkbox"/> None 0 <input type="checkbox"/> Other U <input type="checkbox"/> Undetermined		K Cardiac Arrest Check all applicable boxes 1 <input type="checkbox"/> Pre-arrival arrest? If pre-arrival arrest, was it? 1 <input type="checkbox"/> Witnessed 2 <input type="checkbox"/> Bystander CPR 2 <input type="checkbox"/> Post-arrival arrest? Initial Arrest Rhythm 1 <input type="checkbox"/> V-Fib/ V-Tach 0 <input type="checkbox"/> Other U <input type="checkbox"/> Undetermined	
L1 Initial Level of Provider <input type="checkbox"/>		L2 Highest Level of Provider On Scene		M Patient Status	
1 <input type="checkbox"/> First Responder 2 <input type="checkbox"/> EMT-B (Basic) 3 <input type="checkbox"/> EMT-I (Intermediate) 4 <input type="checkbox"/> EMT-P (Paramedic) 0 <input type="checkbox"/> Other provider N <input type="checkbox"/> No Training		1 <input type="checkbox"/> First Responder 2 <input type="checkbox"/> EMT-B (Basic) 3 <input type="checkbox"/> EMT-I (Intermediate) 4 <input type="checkbox"/> EMT-P (Paramedic) 0 <input type="checkbox"/> Other provider N <input type="checkbox"/> No care provided		1 <input type="checkbox"/> Improved 2 <input type="checkbox"/> Remained same 3 <input type="checkbox"/> Worsened Check if: 1 <input type="checkbox"/> Pulse on Transfer	
				N Disposition 1 <input type="checkbox"/> FD transport to ECF 2 <input type="checkbox"/> Non-FD transport 3 <input type="checkbox"/> Non-FD transFD attend 4 <input type="checkbox"/> Non-emergency transfer 0 <input type="checkbox"/> Other N <input type="checkbox"/> Not transported	

NFIRS-6 Rev ision 06/30/04

FIGURE 3-10. NFIRS-7 Hazardous Materials (HazMat) Form

A FDID <input type="text"/> State <input type="text"/> Incident Date <input type="text"/> MM <input type="text"/> DD <input type="text"/> YYYY <input type="text"/> Station <input type="text"/> Incident Number <input type="text"/> Exposure <input type="text"/> Haz No <input type="text"/> <input type="checkbox"/> Delete <input type="checkbox"/> Change		NFIRS - 7 HazMat																													
B HazMat ID UN Number <input type="text"/> DOT Hazard Classification <input type="text"/> CAS Registration Number <input type="text"/> Chemical Name <input type="text"/>																															
C1 Container Type <input type="text"/> Container Type <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> More hazardous materials? Use additional sheets. </div>	C2 Estimated Container Capacity <input type="text"/> , <input type="text"/> , <input type="text"/> Capacity: by volume or weight C3 Units: Capacity Check one box <table style="width: 100%;"> <tr> <td style="width: 50%;">VOLUME</td> <td style="width: 50%;">WEIGHT</td> </tr> <tr> <td>11 <input type="checkbox"/> Ounces</td> <td>21 <input type="checkbox"/> Ounces</td> </tr> <tr> <td>12 <input type="checkbox"/> Gallons</td> <td>22 <input type="checkbox"/> Pounds</td> </tr> <tr> <td>13 <input type="checkbox"/> Barrels: 42 gal.</td> <td>23 <input type="checkbox"/> Grams</td> </tr> <tr> <td>14 <input type="checkbox"/> Liters</td> <td>24 <input type="checkbox"/> Kilograms</td> </tr> <tr> <td>15 <input type="checkbox"/> Cubic feet</td> <td></td> </tr> <tr> <td>16 <input type="checkbox"/> Cubic meters</td> <td></td> </tr> </table>	VOLUME	WEIGHT	11 <input type="checkbox"/> Ounces	21 <input type="checkbox"/> Ounces	12 <input type="checkbox"/> Gallons	22 <input type="checkbox"/> Pounds	13 <input type="checkbox"/> Barrels: 42 gal.	23 <input type="checkbox"/> Grams	14 <input type="checkbox"/> Liters	24 <input type="checkbox"/> Kilograms	15 <input type="checkbox"/> Cubic feet		16 <input type="checkbox"/> Cubic meters		D1 Estimated Amount Released <input type="text"/> , <input type="text"/> , <input type="text"/> Amount released: by volume or weight D2 Units: Released Check one box <table style="width: 100%;"> <tr> <td style="width: 50%;">VOLUME</td> <td style="width: 50%;">WEIGHT</td> </tr> <tr> <td>11 <input type="checkbox"/> Ounces</td> <td>21 <input type="checkbox"/> Ounces</td> </tr> <tr> <td>12 <input type="checkbox"/> Gallons</td> <td>22 <input type="checkbox"/> Pounds</td> </tr> <tr> <td>13 <input type="checkbox"/> Barrels: 42 gal.</td> <td>23 <input type="checkbox"/> Grams</td> </tr> <tr> <td>14 <input type="checkbox"/> Liters</td> <td>24 <input type="checkbox"/> Kilograms</td> </tr> <tr> <td>15 <input type="checkbox"/> Cubic feet</td> <td></td> </tr> <tr> <td>16 <input type="checkbox"/> Cubic meters</td> <td></td> </tr> </table>	VOLUME	WEIGHT	11 <input type="checkbox"/> Ounces	21 <input type="checkbox"/> Ounces	12 <input type="checkbox"/> Gallons	22 <input type="checkbox"/> Pounds	13 <input type="checkbox"/> Barrels: 42 gal.	23 <input type="checkbox"/> Grams	14 <input type="checkbox"/> Liters	24 <input type="checkbox"/> Kilograms	15 <input type="checkbox"/> Cubic feet		16 <input type="checkbox"/> Cubic meters		E1 Physical State When Released 1 <input type="checkbox"/> Solid 2 <input type="checkbox"/> Liquid 3 <input type="checkbox"/> Gas U <input type="checkbox"/> Undetermined E2 Released Into <input type="text"/> Released into
VOLUME	WEIGHT																														
11 <input type="checkbox"/> Ounces	21 <input type="checkbox"/> Ounces																														
12 <input type="checkbox"/> Gallons	22 <input type="checkbox"/> Pounds																														
13 <input type="checkbox"/> Barrels: 42 gal.	23 <input type="checkbox"/> Grams																														
14 <input type="checkbox"/> Liters	24 <input type="checkbox"/> Kilograms																														
15 <input type="checkbox"/> Cubic feet																															
16 <input type="checkbox"/> Cubic meters																															
VOLUME	WEIGHT																														
11 <input type="checkbox"/> Ounces	21 <input type="checkbox"/> Ounces																														
12 <input type="checkbox"/> Gallons	22 <input type="checkbox"/> Pounds																														
13 <input type="checkbox"/> Barrels: 42 gal.	23 <input type="checkbox"/> Grams																														
14 <input type="checkbox"/> Liters	24 <input type="checkbox"/> Kilograms																														
15 <input type="checkbox"/> Cubic feet																															
16 <input type="checkbox"/> Cubic meters																															
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Complete the remainder of this form only for the first hazardous material involved in this incident. </div> F1 Released From: Check all applicable boxes <input type="checkbox"/> Below grade 1 <input type="checkbox"/> Inside/on structure <input type="text"/> Story of release 2 <input type="checkbox"/> Outside of structure		F2 Population Density 1 <input type="checkbox"/> Urban 2 <input type="checkbox"/> Suburban 3 <input type="checkbox"/> Rural G1 Area Affected 1 <input type="checkbox"/> Square Feet 2 <input type="checkbox"/> Blocks 3 <input type="checkbox"/> Square Miles <input type="text"/> , <input type="text"/> Enter measurement	G2 Area Evacuated <input type="checkbox"/> None 1 <input type="checkbox"/> Square Feet <input type="text"/> , <input type="text"/> 2 <input type="checkbox"/> Blocks 3 <input type="checkbox"/> Square Miles Enter Measurement G3 Estimated Number of People Evacuated <input type="text"/> , <input type="text"/> G4 Estimated Number of Buildings Evacuated <input type="text"/> , <input type="text"/> <input type="checkbox"/> None	H HazMat Actions Taken Enter up to three actions taken <input type="text"/> <input type="text"/> Primary Action Taken (1) <input type="text"/> <input type="text"/> Additional Action Taken (2) <input type="text"/> <input type="text"/> Additional Action Taken (3) I If fire or explosion is involved with a release, which occurred first? 1 <input type="checkbox"/> Ignition U <input type="checkbox"/> Undetermined 2 <input type="checkbox"/> Release																											
J Cause of Release <input type="checkbox"/> Intentional 2 <input type="checkbox"/> Unintentional release 3 <input type="checkbox"/> Container/containment failure 4 <input type="checkbox"/> Act of nature 5 <input type="checkbox"/> Cause under investigation U <input type="checkbox"/> Cause undetermined after investigation	K Factors Contributing to Release Enter up to three contributing factors <input type="text"/> <input type="text"/> Factor Contributing To Release (1) <input type="text"/> <input type="text"/> Factor Contributing To Release (2) <input type="text"/> <input type="text"/> Factor Contributing To Release (3)		L Factors Affecting Mitigation Enter up to three factors or impediments that affected the mitigation of the incident <input type="text"/> <input type="text"/> Factor or impediment (1) <input type="text"/> <input type="text"/> Factor or impediment (2) <input type="text"/> <input type="text"/> Factor or impediment (3)																												
M Equipment Involved In Release <input type="checkbox"/> None <input type="text"/> <input type="text"/> Equipment involved in release Brand <input type="text"/> Model <input type="text"/> Serial Number <input type="text"/> Year <input type="text"/>	N Mobile Property Involved In Release <input type="checkbox"/> None <input type="text"/> <input type="text"/> Mobile property type <input type="text"/> <input type="text"/> Mobile property make Model <input type="text"/> Year <input type="text"/> License Plate Number <input type="text"/> State <input type="text"/> DOT Number/ ICC Number <input type="text"/>		O HazMat Disposition <input type="checkbox"/> 1 <input type="checkbox"/> Completed by fire service only 2 <input type="checkbox"/> Completed w/ fire service present 3 <input type="checkbox"/> Released to local agency 4 <input type="checkbox"/> Released to county agency 5 <input type="checkbox"/> Released to state agency 6 <input type="checkbox"/> Released to federal agency 7 <input type="checkbox"/> Released to private agency 8 <input type="checkbox"/> Released to property owner or manager P HazMat Civilian Casualties <table style="width: 100%;"> <tr> <td style="width: 50%;">Deaths</td> <td style="width: 50%;">Injuries</td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </table> NFIRS-7 Revision 5/6/99	Deaths	Injuries	<input type="text"/>	<input type="text"/>																								
Deaths	Injuries																														
<input type="text"/>	<input type="text"/>																														

FIGURE 3-11. NFIRS-8 Wildland Fire Form

A <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> FDID <input style="width: 40px;" type="text"/> </div> <div style="text-align: center;"> State <input style="width: 40px;" type="text"/> </div> <div style="text-align: center;"> Incident Date <input style="width: 40px;" type="text"/> MM <input style="width: 40px;" type="text"/> DD <input style="width: 40px;" type="text"/> YYYY <input style="width: 40px;" type="text"/> </div> <div style="text-align: center;"> Station <input style="width: 40px;" type="text"/> </div> <div style="text-align: center;"> Incident Number <input style="width: 40px;" type="text"/> </div> <div style="text-align: center;"> Exposure <input style="width: 40px;" type="text"/> </div> <div style="text-align: right;"> <input type="checkbox"/> Delete <input type="checkbox"/> Change </div> </div>		NFIRS - 8 Wildland Fire	
B Alternate Location Specification <small>Enter latitude/longitude OR Section/Township/Range/Subsection/Meridian if Section B on the Basic Module is not completed</small>		D1 Wildland Fire Cause ☆	
Latitude <input style="width: 40px;" type="text"/> Longitude <input style="width: 40px;" type="text"/> Township <input style="width: 40px;" type="text"/> Range <input style="width: 40px;" type="text"/> Meridian <input style="width: 40px;" type="text"/> Section <input style="width: 40px;" type="text"/> Subsection <input style="width: 40px;" type="text"/>		<div style="display: flex; justify-content: space-between;"> <div> 1 <input type="checkbox"/> Natural source 2 <input type="checkbox"/> Equipment 3 <input type="checkbox"/> Smoking 4 <input type="checkbox"/> Open/outdoor fire 5 <input type="checkbox"/> Debris/vegetation burn 6 <input type="checkbox"/> Structure (exposure) 7 <input type="checkbox"/> Incendiary </div> <div> 8 <input type="checkbox"/> Misuse of fire 0 <input type="checkbox"/> Other U <input type="checkbox"/> Undetermined </div> </div>	
C Area Type ☆		D2 Human Factors Contributing To Ignition <small>Check as many boxes as are applicable.</small> <input type="checkbox"/> None	
1 <input type="checkbox"/> Rural, farms >50 acres 2 <input type="checkbox"/> Urban (heavily populated) 3 <input type="checkbox"/> Rural/urban 4 <input type="checkbox"/> Urban-wildland interface area		1 <input type="checkbox"/> Asleep 2 <input type="checkbox"/> Possible alcohol or drug impairment 3 <input type="checkbox"/> Unattended person 4 <input type="checkbox"/> Possibly mentally disabled 5 <input type="checkbox"/> Physically disabled 6 <input type="checkbox"/> Multiple persons involved 7 <input type="checkbox"/> Age was a factor	
D3 Factors Contributing to Ignition #1 <input style="width: 40px;" type="text"/> #2 <input style="width: 40px;" type="text"/>		D4 Fire Suppression Factors #1 <input style="width: 40px;" type="text"/> #2 <input style="width: 40px;" type="text"/> #3 <input style="width: 40px;" type="text"/>	
E Heat Source <input style="width: 40px;" type="text"/>		F Mobile Property Type <input style="width: 40px;" type="text"/>	
G Equipment Involved In Ignition <input style="width: 40px;" type="text"/>		H Weather Information NFIRS Weather Station ID <input style="width: 40px;" type="text"/> Weather Type <input style="width: 40px;" type="text"/> Wind Direction <input style="width: 40px;" type="text"/> Wind speed MPH <input style="width: 40px;" type="text"/> Air Temperature <input style="width: 40px;" type="text"/> F° <input type="checkbox"/> Check if negative Relative Humidity <input style="width: 40px;" type="text"/> % Fuel Moisture <input style="width: 40px;" type="text"/> % Fire Danger Rating <input style="width: 40px;" type="text"/>	
I1 Number of Buildings Ignited <input style="width: 40px;" type="text"/> <input type="checkbox"/> None <small>Number of buildings that were ignited in Wildland fire</small>		I4 Primary Crops Burned <small>Identify up to 3 crops if any crops were burned</small> Crop 1 <input style="width: 40px;" type="text"/> Crop 2 <input style="width: 40px;" type="text"/> Crop 3 <input style="width: 40px;" type="text"/>	
I2 Number of Buildings Threatened <input style="width: 40px;" type="text"/> <input type="checkbox"/> None <small>Number of buildings that were threatened by Wildland fire but were not involved</small>		I3 Total Acres Burned ☆ <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> . <input style="width: 40px;" type="text"/>	
J Property Management <small>Indicate the percent of the total acres burned per ownership type then check the ONE box to identify the property ownership at the origin of the fire. If the ownership at origin is Federal, enter the Federal Agency Code.</small>		K NFDRS Fuel Model at Origin <small>Enter the code and the descriptor corresponding to the NFDRS Fuel Model at Origin</small> <input style="width: 40px;" type="text"/>	
Ownership <input style="width: 40px;" type="text"/> % Total Acres Burned <input style="width: 40px;" type="text"/> U <input type="checkbox"/> Undetermined		L1 Person Responsible For Fire 1 <input type="checkbox"/> Identified person caused fire 2 <input type="checkbox"/> Unidentified person caused fire 3 <input type="checkbox"/> Fire not caused by person <small>If person identified complete the rest of Section L</small>	
Private 1 <input type="checkbox"/> Tax paying 2 <input type="checkbox"/> Non tax paying		L2 Gender of Person Involved 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female	
Public 3 <input type="checkbox"/> City, town, village, local 4 <input type="checkbox"/> County or parish 5 <input type="checkbox"/> State or province 6 <input type="checkbox"/> Federal 7 <input type="checkbox"/> Foreign 8 <input type="checkbox"/> Military 0 <input type="checkbox"/> Other		L3 Age or Date of Birth Age In Years <input style="width: 40px;" type="text"/> OR Date of Birth <input style="width: 40px;" type="text"/> / <input style="width: 40px;" type="text"/> / <input style="width: 40px;" type="text"/>	
Federal Agency Code <input style="width: 40px;" type="text"/>		L4 Activity of Person <input style="width: 40px;" type="text"/>	
M Right of Way <small>Required if less than 100 feet</small> Horizontal distance from right of way <input style="width: 40px;" type="text"/> Feet Type of right of way <input style="width: 40px;" type="text"/>		N Fire Behavior <small>These optional descriptors refer to observations made at the point of initial attack</small> Elevation <input style="width: 40px;" type="text"/> Feet Relative position on slope <input style="width: 40px;" type="text"/> Aspect <input style="width: 40px;" type="text"/> Flame Length <input style="width: 40px;" type="text"/> Feet Rate of spread <input style="width: 40px;" type="text"/> Chains per Hour	

NFIRS-8 Revision 2/12/99

FIGURE 3-12. NFIRS-9 Apparatus or Resources Form

<div style="float: right;"> <input type="checkbox"/> Delete <input type="checkbox"/> Change </div> NFIRS - 9 Apparatus or Resources									
<div style="display: flex; justify-content: space-between;"> <div>FDID <input style="width: 100px;" type="text"/></div> <div>State <input style="width: 100px;" type="text"/></div> <div>Incident Date <input style="width: 100px;" type="text"/></div> <div>Station <input style="width: 100px;" type="text"/></div> <div>Incident Number <input style="width: 100px;" type="text"/></div> <div>Exposure <input style="width: 100px;" type="text"/></div> </div>									
B Apparatus or Resource <small>Use codes listed below</small>		Dates and Times <small>Check if same date as alarm date</small> <div style="display: flex; justify-content: space-around;"> Month Day Year Hours/Mins </div>			Sent <input checked="" type="checkbox"/>	Number of People <input style="width: 50px;" type="text"/>	Use <small>Check ONE box for each apparatus to indicate its main use at the incident.</small>	Actions Taken	
1	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
2	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
3	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
4	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
5	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
6	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
7	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
8	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			
9	ID <input style="width: 100px;" type="text"/> Type <input style="width: 100px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 100px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 100px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 100px;" type="text"/>	<input type="checkbox"/>	<input style="width: 50px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>			

Type of Apparatus or Resource Ground Fire Suppression 11 Engine 12 Truck or aerial 13 Quint 14 Tanker & pumper combination 16 Brush truck 17 ARF (Aircraft Rescue and Firefighting) 10 Ground fire suppression, other Heavy Ground Equipment 21 Dozer or plow 22 Tractor 24 Tanker or tender 20 Heavy equipment, other	Aircraft 41 Aircraft: fixed wing tanker 42 Helitanker 43 Helicopter 40 Aircraft, other Marine Equipment 51 Fire boat with pump 52 Boat, no pump 50 Marine apparatus, other Support Equipment 61 Breathing apparatus support 62 Light and air unit 60 Support apparatus, other	Medical & Rescue 71 Rescue unit 72 Urban search & rescue unit 73 High angle rescue unit 75 BLS unit 76 ALS unit 70 Medical and rescue unit, other Other 91 Mobile command post 92 Chief officer car 93 HazMat unit 94 Type 1 hand crew 95 Type 2 hand crew 99 Privately owned vehicle 00 Other apparatus/resource
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More apparatus? Use additional sheets.

NN None
UU Undetermined

NFIRS-9 Revision 11/17/98

FIGURE 3-13. NFIRS-10 Personnel Form

A	FDID <input style="width: 40px;" type="text"/>	State <input style="width: 20px;" type="text"/>	Incident Date <input style="width: 20px;" type="text"/> MM <input style="width: 20px;" type="text"/> DD <input style="width: 20px;" type="text"/> YYYY <input style="width: 20px;" type="text"/>	Station <input style="width: 40px;" type="text"/>	Incident Number <input style="width: 40px;" type="text"/>	Exposure <input style="width: 40px;" type="text"/>	<input type="checkbox"/> Delete <input type="checkbox"/> Change	NFIRS - 10 Personnel
----------	--	---	--	---	---	--	--	---------------------------------

B Apparatus or Resource <input style="width: 10px;" type="text"/>	Dates and Times <small>Check if same date as alarm date</small> Month Day Year Hours/Mins	Sent <input checked="" type="checkbox"/>	Number of People <input style="width: 20px;" type="text"/>	Use <input style="width: 10px;" type="text"/> <small>Check ONE box for each apparatus to indicate its main use at the incident.</small>	Actions Taken <small>List up to 4 actions for each apparatus and each personnel.</small>
1 ID <input style="width: 40px;" type="text"/> Type <input style="width: 40px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>	Sent <input type="checkbox"/>	# <input style="width: 20px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/>

Personnel ID <input style="width: 10px;" type="text"/>	Name	Rank or Grade	Attend <input checked="" type="checkbox"/>	Action Taken	Action Taken	Action Taken	Action Taken
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				

2 ID <input style="width: 40px;" type="text"/> Type <input style="width: 40px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>	Sent <input type="checkbox"/>	# <input style="width: 20px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/>
---	---	-------------------------------	---	--	--

Personnel ID <input style="width: 10px;" type="text"/>	Name	Rank or Grade	Attend <input checked="" type="checkbox"/>	Action Taken	Action Taken	Action Taken	Action Taken
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				

3 ID <input style="width: 40px;" type="text"/> Type <input style="width: 40px;" type="text"/>	Dispatch <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> Arrival <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> Clear <input type="checkbox"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>	Sent <input type="checkbox"/>	# <input style="width: 20px;" type="text"/>	<input type="checkbox"/> Suppression <input type="checkbox"/> EMS <input type="checkbox"/> Other	<input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/>
---	---	-------------------------------	---	--	--

Personnel ID <input style="width: 10px;" type="text"/>	Name	Rank or Grade	Attend <input checked="" type="checkbox"/>	Action Taken	Action Taken	Action Taken	Action Taken
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				
<input style="width: 40px;" type="text"/>			<input type="checkbox"/>				

NFIRS-10 Rev ision 11/17/98

FIGURE 3-14. NFIRS-11 Arson Form

A FDID <input type="text"/> State <input type="text"/> Incident Date <input type="text"/> MM <input type="text"/> DD <input type="text"/> YYYY <input type="text"/> Station <input type="text"/> Incident Number <input type="text"/> Exposure <input type="text"/> <input type="checkbox"/> Delete <input type="checkbox"/> Change NFIRS - 11 Arson																																																	
B Agency Referred To <input type="checkbox"/> None Street Address <input type="text"/> Their Case Number <input type="text"/> Agency Name <input type="text"/> City <input type="text"/> Their ORI <input type="text"/> Agency Phone Number <input type="text"/> - <input type="text"/> - <input type="text"/> State <input type="text"/> Zip Code <input type="text"/> - <input type="text"/> Their Federal Identifier (FID) <input type="text"/> Their FDID <input type="text"/>																																																	
C Case Status 1 <input type="checkbox"/> Investigation open 4 <input type="checkbox"/> Closed with arrest 2 <input type="checkbox"/> Investigation closed 5 <input type="checkbox"/> Closed with exceptional clearance 3 <input type="checkbox"/> Investigation inactive	D Availability of Material First Ignited 1 <input type="checkbox"/> Transported to scene 2 <input type="checkbox"/> Available at scene U <input type="checkbox"/> Unknown																																																
E Suspected Motivation Factors Check up to three factors <table style="width: 100%; border: none;"> <tr> <td>11 <input type="checkbox"/> Extortion</td> <td>22 <input type="checkbox"/> Hate crime</td> <td>42 <input type="checkbox"/> Vanity/recognition</td> <td>54 <input type="checkbox"/> Burglary</td> </tr> <tr> <td>12 <input type="checkbox"/> Labor unrest</td> <td>23 <input type="checkbox"/> Institutional</td> <td>43 <input type="checkbox"/> Thrills</td> <td>61 <input type="checkbox"/> Homicide concealment</td> </tr> <tr> <td>13 <input type="checkbox"/> Insurance fraud</td> <td>24 <input type="checkbox"/> Societal</td> <td>44 <input type="checkbox"/> Attention/sympathy</td> <td>62 <input type="checkbox"/> Burglary concealment</td> </tr> <tr> <td>14 <input type="checkbox"/> Intimidation</td> <td>31 <input type="checkbox"/> Protest</td> <td>45 <input type="checkbox"/> Sexual excitement</td> <td>63 <input type="checkbox"/> Auto theft concealment</td> </tr> <tr> <td>15 <input type="checkbox"/> Void contract/lease</td> <td>32 <input type="checkbox"/> Civil unrest</td> <td>51 <input type="checkbox"/> Homicide</td> <td>64 <input type="checkbox"/> Destroy records/evidence</td> </tr> <tr> <td>21 <input type="checkbox"/> Personal</td> <td>41 <input type="checkbox"/> Fireplay/curiosity</td> <td>52 <input type="checkbox"/> Suicide</td> <td>00 <input type="checkbox"/> Other motivation</td> </tr> <tr> <td></td> <td></td> <td>53 <input type="checkbox"/> Domestic violence</td> <td>UU <input type="checkbox"/> Unknown motivation</td> </tr> </table>		11 <input type="checkbox"/> Extortion	22 <input type="checkbox"/> Hate crime	42 <input type="checkbox"/> Vanity/recognition	54 <input type="checkbox"/> Burglary	12 <input type="checkbox"/> Labor unrest	23 <input type="checkbox"/> Institutional	43 <input type="checkbox"/> Thrills	61 <input type="checkbox"/> Homicide concealment	13 <input type="checkbox"/> Insurance fraud	24 <input type="checkbox"/> Societal	44 <input type="checkbox"/> Attention/sympathy	62 <input type="checkbox"/> Burglary concealment	14 <input type="checkbox"/> Intimidation	31 <input type="checkbox"/> Protest	45 <input type="checkbox"/> Sexual excitement	63 <input type="checkbox"/> Auto theft concealment	15 <input type="checkbox"/> Void contract/lease	32 <input type="checkbox"/> Civil unrest	51 <input type="checkbox"/> Homicide	64 <input type="checkbox"/> Destroy records/evidence	21 <input type="checkbox"/> Personal	41 <input type="checkbox"/> Fireplay/curiosity	52 <input type="checkbox"/> Suicide	00 <input type="checkbox"/> Other motivation			53 <input type="checkbox"/> Domestic violence	UU <input type="checkbox"/> Unknown motivation																				
11 <input type="checkbox"/> Extortion	22 <input type="checkbox"/> Hate crime	42 <input type="checkbox"/> Vanity/recognition	54 <input type="checkbox"/> Burglary																																														
12 <input type="checkbox"/> Labor unrest	23 <input type="checkbox"/> Institutional	43 <input type="checkbox"/> Thrills	61 <input type="checkbox"/> Homicide concealment																																														
13 <input type="checkbox"/> Insurance fraud	24 <input type="checkbox"/> Societal	44 <input type="checkbox"/> Attention/sympathy	62 <input type="checkbox"/> Burglary concealment																																														
14 <input type="checkbox"/> Intimidation	31 <input type="checkbox"/> Protest	45 <input type="checkbox"/> Sexual excitement	63 <input type="checkbox"/> Auto theft concealment																																														
15 <input type="checkbox"/> Void contract/lease	32 <input type="checkbox"/> Civil unrest	51 <input type="checkbox"/> Homicide	64 <input type="checkbox"/> Destroy records/evidence																																														
21 <input type="checkbox"/> Personal	41 <input type="checkbox"/> Fireplay/curiosity	52 <input type="checkbox"/> Suicide	00 <input type="checkbox"/> Other motivation																																														
		53 <input type="checkbox"/> Domestic violence	UU <input type="checkbox"/> Unknown motivation																																														
F Apparent Group Involvement Check up to three factors 1 <input type="checkbox"/> Terrorist group 2 <input type="checkbox"/> Gang 3 <input type="checkbox"/> Anti-government group 4 <input type="checkbox"/> Outlaw motorcycle organization 5 <input type="checkbox"/> Organized crime 6 <input type="checkbox"/> Racial/ethnic hate group 7 <input type="checkbox"/> Religious hate group 8 <input type="checkbox"/> Sexual preference hate group 0 <input type="checkbox"/> Other group N <input type="checkbox"/> No group involvement, acted alone U <input type="checkbox"/> Unknown G1 Entry Method Entry Method <input type="text"/>	H Incendiary Devices Select one from each category <table style="width: 100%; border: none;"> <tr> <td colspan="2">CONTAINER</td> <td>NN <input type="checkbox"/> None</td> </tr> <tr> <td>11 <input type="checkbox"/> Bottle (glass)</td> <td>14 <input type="checkbox"/> Pressurized Container</td> <td>17 <input type="checkbox"/> Box</td> </tr> <tr> <td>12 <input type="checkbox"/> Bottle (plastic)</td> <td>15 <input type="checkbox"/> Can</td> <td>00 <input type="checkbox"/> Other Container</td> </tr> <tr> <td>13 <input type="checkbox"/> Jug</td> <td>16 <input type="checkbox"/> Gasoline or fuel can</td> <td>UU <input type="checkbox"/> Unknown</td> </tr> <tr> <td colspan="2">IGNITION/DELAY DEVICE</td> <td>NN <input type="checkbox"/> None</td> </tr> <tr> <td>11 <input type="checkbox"/> Wick or Fuse</td> <td>17 <input type="checkbox"/> Road flare/fuse</td> <td></td> </tr> <tr> <td>12 <input type="checkbox"/> Candle</td> <td>18 <input type="checkbox"/> Chemical Component</td> <td></td> </tr> <tr> <td>13 <input type="checkbox"/> Cigarette & Matchbook</td> <td>19 <input type="checkbox"/> Trailer/Streamer</td> <td></td> </tr> <tr> <td>14 <input type="checkbox"/> Electronic Component</td> <td>20 <input type="checkbox"/> Open flame source</td> <td></td> </tr> <tr> <td>15 <input type="checkbox"/> Mechanical Device</td> <td>00 <input type="checkbox"/> Other delay device</td> <td></td> </tr> <tr> <td>16 <input type="checkbox"/> Remote Control</td> <td>UU <input type="checkbox"/> Unknown</td> <td></td> </tr> <tr> <td colspan="2">FUEL</td> <td>NN <input type="checkbox"/> None</td> </tr> <tr> <td>11 <input type="checkbox"/> Ordinary Combustibles</td> <td>16 <input type="checkbox"/> Pyrotechnic material</td> <td></td> </tr> <tr> <td>12 <input type="checkbox"/> Flammable gas</td> <td>17 <input type="checkbox"/> Explosive material</td> <td></td> </tr> <tr> <td>14 <input type="checkbox"/> Ignitable liquid</td> <td>00 <input type="checkbox"/> Other material</td> <td></td> </tr> <tr> <td>15 <input type="checkbox"/> Ignitable solid</td> <td>UU <input type="checkbox"/> Unknown</td> <td></td> </tr> </table>	CONTAINER		NN <input type="checkbox"/> None	11 <input type="checkbox"/> Bottle (glass)	14 <input type="checkbox"/> Pressurized Container	17 <input type="checkbox"/> Box	12 <input type="checkbox"/> Bottle (plastic)	15 <input type="checkbox"/> Can	00 <input type="checkbox"/> Other Container	13 <input type="checkbox"/> Jug	16 <input type="checkbox"/> Gasoline or fuel can	UU <input type="checkbox"/> Unknown	IGNITION/DELAY DEVICE		NN <input type="checkbox"/> None	11 <input type="checkbox"/> Wick or Fuse	17 <input type="checkbox"/> Road flare/fuse		12 <input type="checkbox"/> Candle	18 <input type="checkbox"/> Chemical Component		13 <input type="checkbox"/> Cigarette & Matchbook	19 <input type="checkbox"/> Trailer/Streamer		14 <input type="checkbox"/> Electronic Component	20 <input type="checkbox"/> Open flame source		15 <input type="checkbox"/> Mechanical Device	00 <input type="checkbox"/> Other delay device		16 <input type="checkbox"/> Remote Control	UU <input type="checkbox"/> Unknown		FUEL		NN <input type="checkbox"/> None	11 <input type="checkbox"/> Ordinary Combustibles	16 <input type="checkbox"/> Pyrotechnic material		12 <input type="checkbox"/> Flammable gas	17 <input type="checkbox"/> Explosive material		14 <input type="checkbox"/> Ignitable liquid	00 <input type="checkbox"/> Other material		15 <input type="checkbox"/> Ignitable solid	UU <input type="checkbox"/> Unknown	
CONTAINER		NN <input type="checkbox"/> None																																															
11 <input type="checkbox"/> Bottle (glass)	14 <input type="checkbox"/> Pressurized Container	17 <input type="checkbox"/> Box																																															
12 <input type="checkbox"/> Bottle (plastic)	15 <input type="checkbox"/> Can	00 <input type="checkbox"/> Other Container																																															
13 <input type="checkbox"/> Jug	16 <input type="checkbox"/> Gasoline or fuel can	UU <input type="checkbox"/> Unknown																																															
IGNITION/DELAY DEVICE		NN <input type="checkbox"/> None																																															
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15 <input type="checkbox"/> Mechanical Device	00 <input type="checkbox"/> Other delay device																																																
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FUEL		NN <input type="checkbox"/> None																																															
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12 <input type="checkbox"/> Flammable gas	17 <input type="checkbox"/> Explosive material																																																
14 <input type="checkbox"/> Ignitable liquid	00 <input type="checkbox"/> Other material																																																
15 <input type="checkbox"/> Ignitable solid	UU <input type="checkbox"/> Unknown																																																
I Other Investigative Information Check all that apply 1 <input type="checkbox"/> Code violations 2 <input type="checkbox"/> Structure for sale 3 <input type="checkbox"/> Structure vacant 4 <input type="checkbox"/> Other crimes involved 5 <input type="checkbox"/> Illicit drug activity 6 <input type="checkbox"/> Change in Insurance 7 <input type="checkbox"/> Financial problem 8 <input type="checkbox"/> Criminal/Civil actions pending	J Property Ownership 1 <input type="checkbox"/> Private 2 <input type="checkbox"/> City, town, village, local 3 <input type="checkbox"/> County or parish 4 <input type="checkbox"/> State or province 5 <input type="checkbox"/> Federal 6 <input type="checkbox"/> Foreign 7 <input type="checkbox"/> Military 0 <input type="checkbox"/> Other	K Initial Observations Check all that apply 1 <input type="checkbox"/> Windows ajar 5 <input type="checkbox"/> Fire department forced entry 2 <input type="checkbox"/> Doors ajar 6 <input type="checkbox"/> Forced entry prior to FD arrival 3 <input type="checkbox"/> Doors locked 7 <input type="checkbox"/> Security system activated 4 <input type="checkbox"/> Doors unlocked 8 <input type="checkbox"/> Security present, didn't activate L Laboratory Used Check all that apply 1 <input type="checkbox"/> Local 3 <input type="checkbox"/> ATF 5 <input type="checkbox"/> Other 6 <input type="checkbox"/> Private 2 <input type="checkbox"/> State 4 <input type="checkbox"/> FBI Federal N <input type="checkbox"/> None																																															

40

FIGURE 3-16. NFIRS 1S - Supplemental Form

K	FDID <input style="width: 20px;" type="text"/>	★	State <input style="width: 20px;" type="text"/>	★	Incident Date <input style="width: 20px;" type="text"/>	★	Station <input style="width: 20px;" type="text"/>	★	Incident Number <input style="width: 20px;" type="text"/>	★	Exposure <input style="width: 20px;" type="text"/>	★	<input type="checkbox"/> Delete <input type="checkbox"/> Change	NFIRS - 1S Supplemental
----------	--	---	---	---	---	---	---	---	---	---	--	---	--	--

K₁ Person/Entity Involved

Local Option ☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Business name if applicable

Phone Number - -

Mr., Ms., Mrs. First Name MI Last Name Suffix

Number Prefix Street or highway Street Type Suffix

Post office box Apt./Suite/Room City

State Zip Code -

K₂ Person/Entity Involved

Business name if applicable

Phone Number - -

Mr., Ms., Mrs. First Name MI Last Name Suffix

Number Prefix Street or highway Street Type Suffix

Post office box number Apt./Suite/Room City

State Zip Code -

K₃ Person/Entity Involved

Business name if applicable

Phone Number - -

Mr., Ms., Mrs. First Name MI Last Name Suffix

Number Prefix Street or highway Street Type Suffix

Post office box number Apt./Suite/Room City

State Zip Code -

K₄ Person/Entity Involved

Business name if applicable

Phone Number - -

Mr., Ms., Mrs. First Name MI Last Name Suffix

Number Prefix Street or highway Street Type Suffix

Post office box Apt./Suite/Room City

State Zip Code -

K₅ Person/Entity Involved

Business name if applicable

Phone Number - -

Mr., Ms., Mrs. First Name MI Last Name Suffix

Number Prefix Street or highway Street Type Suffix

Post office box number Apt./Suite/Room City

State Zip Code -

NFIRS-11 Revision 6/9/98

NFIRS Version 5.0 Design Documentation - July 2002

NFIRS-11 Revision 6/9/98

Module Logic Flow

This section provides a high level graphical overview of the system flow through each of the NFIRS system modules. Major field navigation and key instructional points are documented.

Each of the NFIRS 5.0 modules can be described as belonging to one of two categories; required or optional. Required modules must be completed when dictated by the type of incident. These module are:

The Basic Incident Module

Must be completed for every incident responded to.

The Fire Module

Must be completed for each fire responded to (except for confined fires).

The Structure Fire Module

Must be completed for all structure files responded to (the first field only is required non-building structures).

Civilian Fire Casualty Module

Must be completed for each civilian fire casualty.

Fire Service Casualty Module

Must be completed for each fire service casualty.

The rest of the NFIRS 5.0 module are optional and their use or non use is decided on a state by state or department by department basis. They are:

EMS Module

Department use is optional. May be state required.

HazMat Module

Department use is optional. May be state required.

Wildland Module

Department use is optional. May be state required.

Apparatus Module

Department use is optional.

Personnel Module

Department use is optional.

Arson Module

Department use is optional. May be state required.

FIGURE 3-18. Basic Module Logic Flow

Basic Module Flow

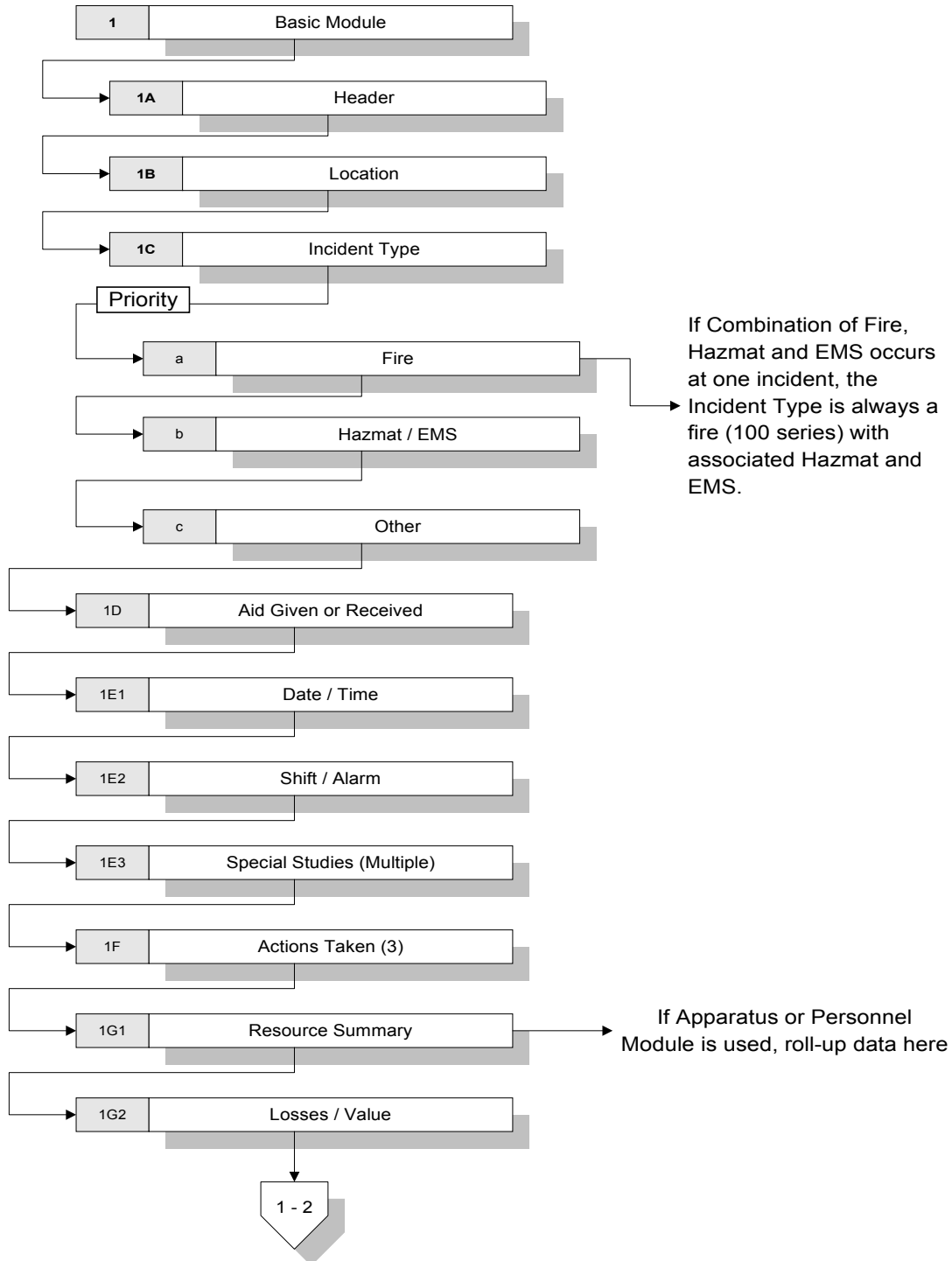


FIGURE 3-19. Basic Module Logic Flow (continued)

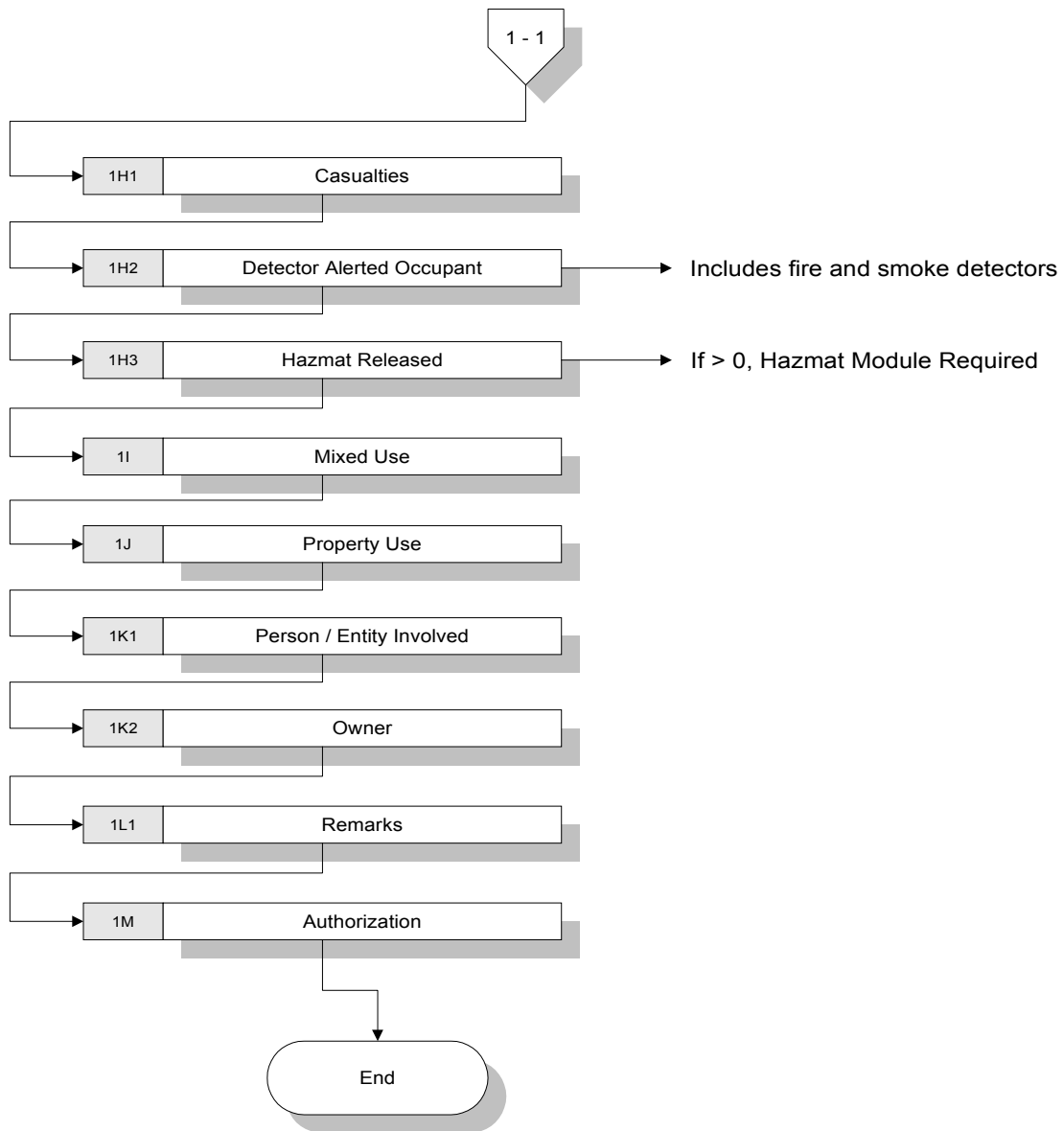


FIGURE 3-20. Fire Module Logic Flow

Fire Module Flow

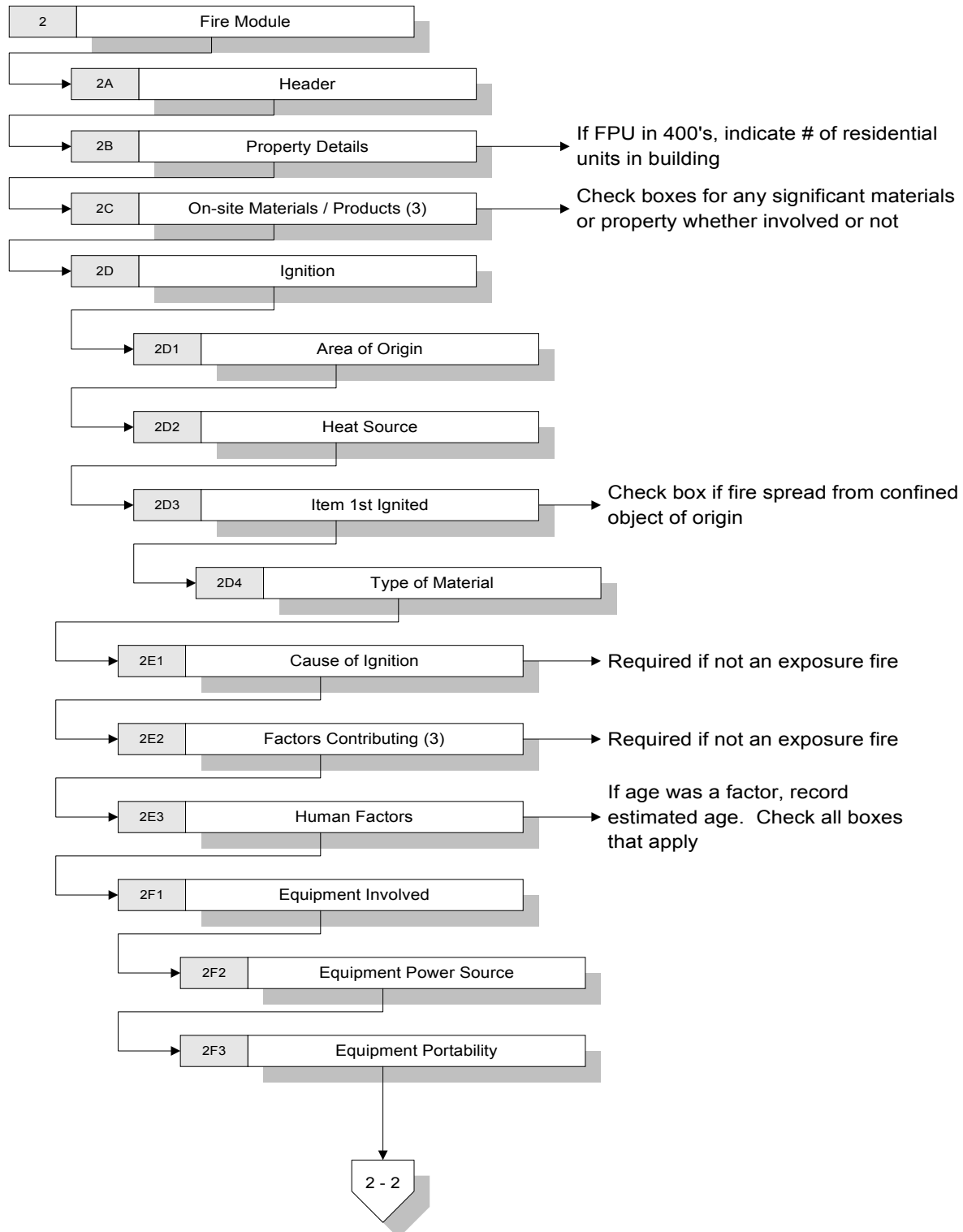


FIGURE 3-21. Fire Module Logic Flow (continued)

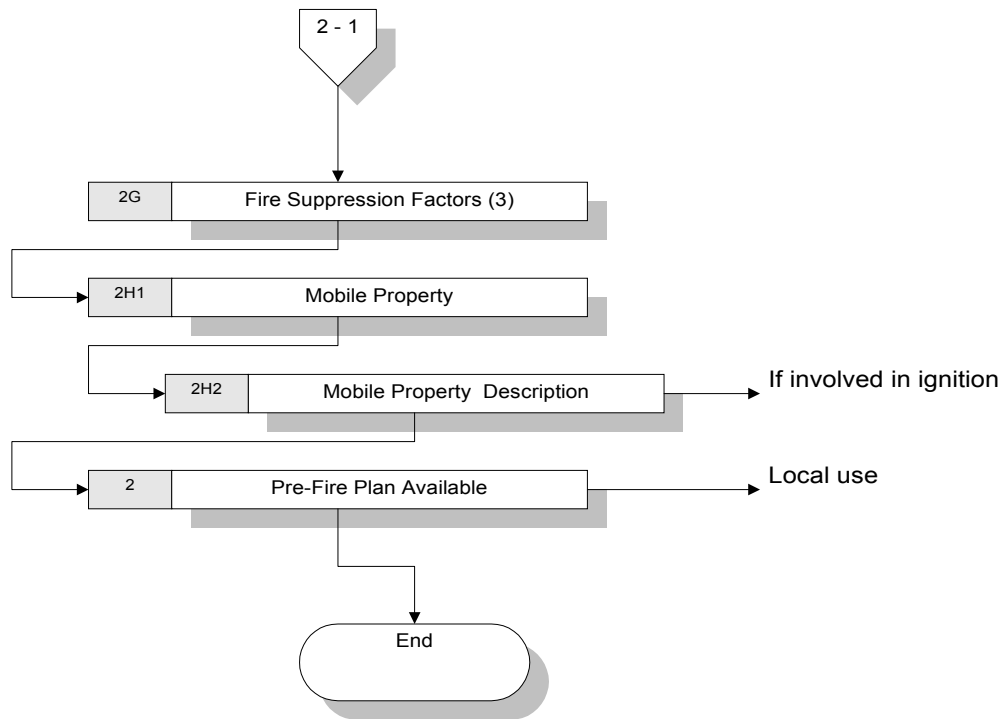


FIGURE 3-22. Structure Fire Module Logic Flow

Structure Fire Module Flow

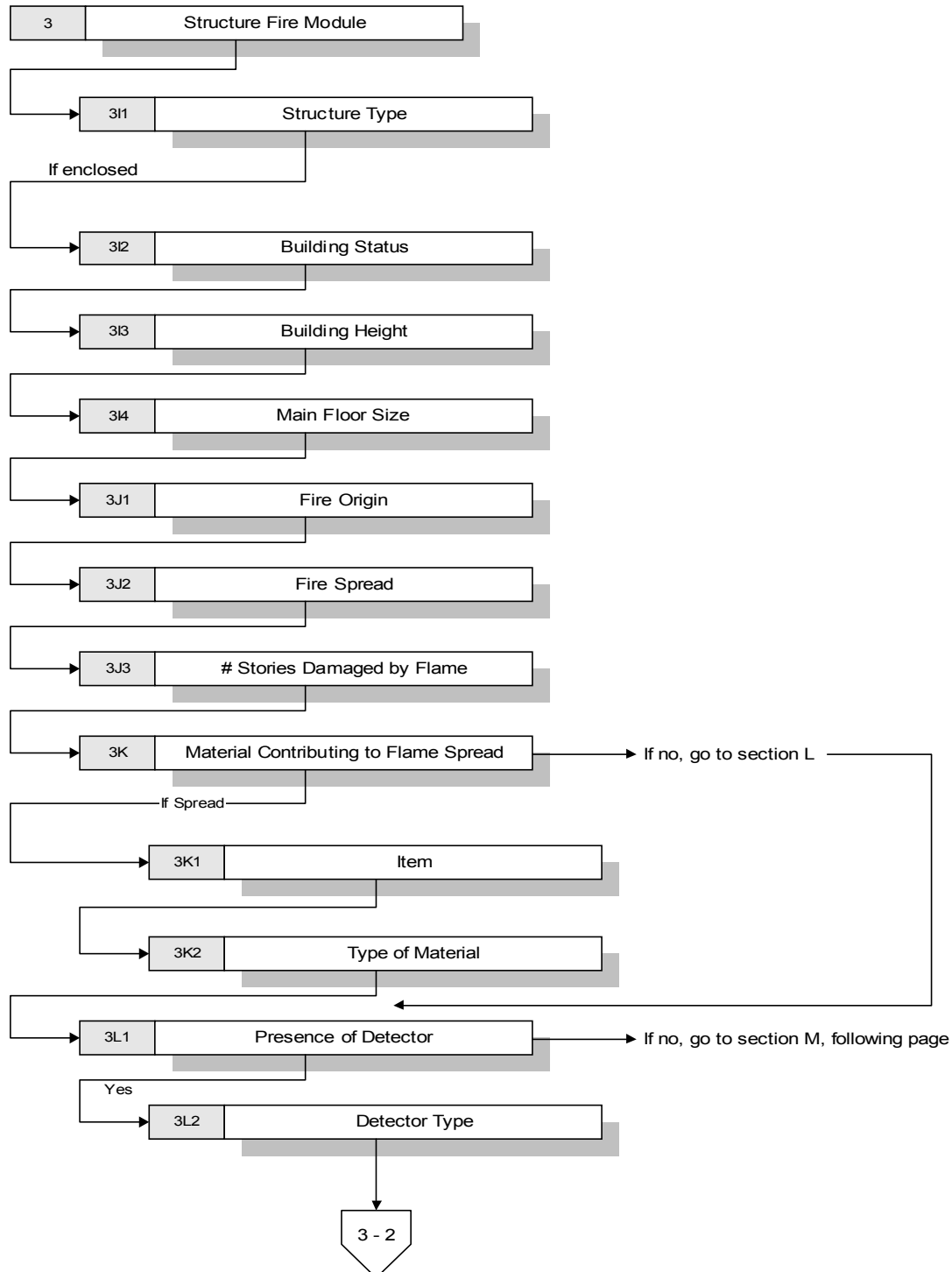


FIGURE 3-23. Structure Fire Module Logic Flow (continued)

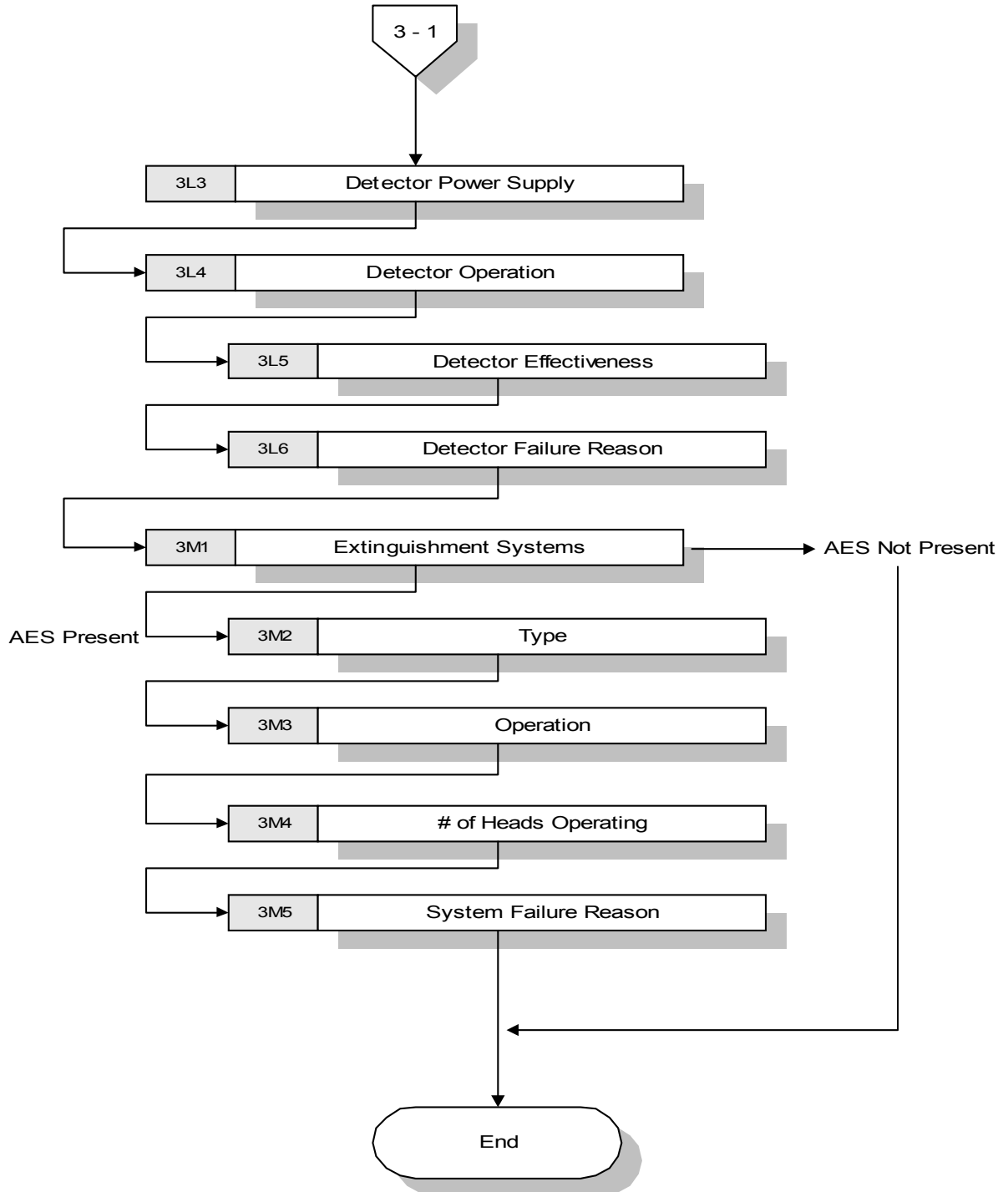


FIGURE 3-24. Civilian Fire Casualty Module Logic Flow

Civilian Fire Casualty Module Flow

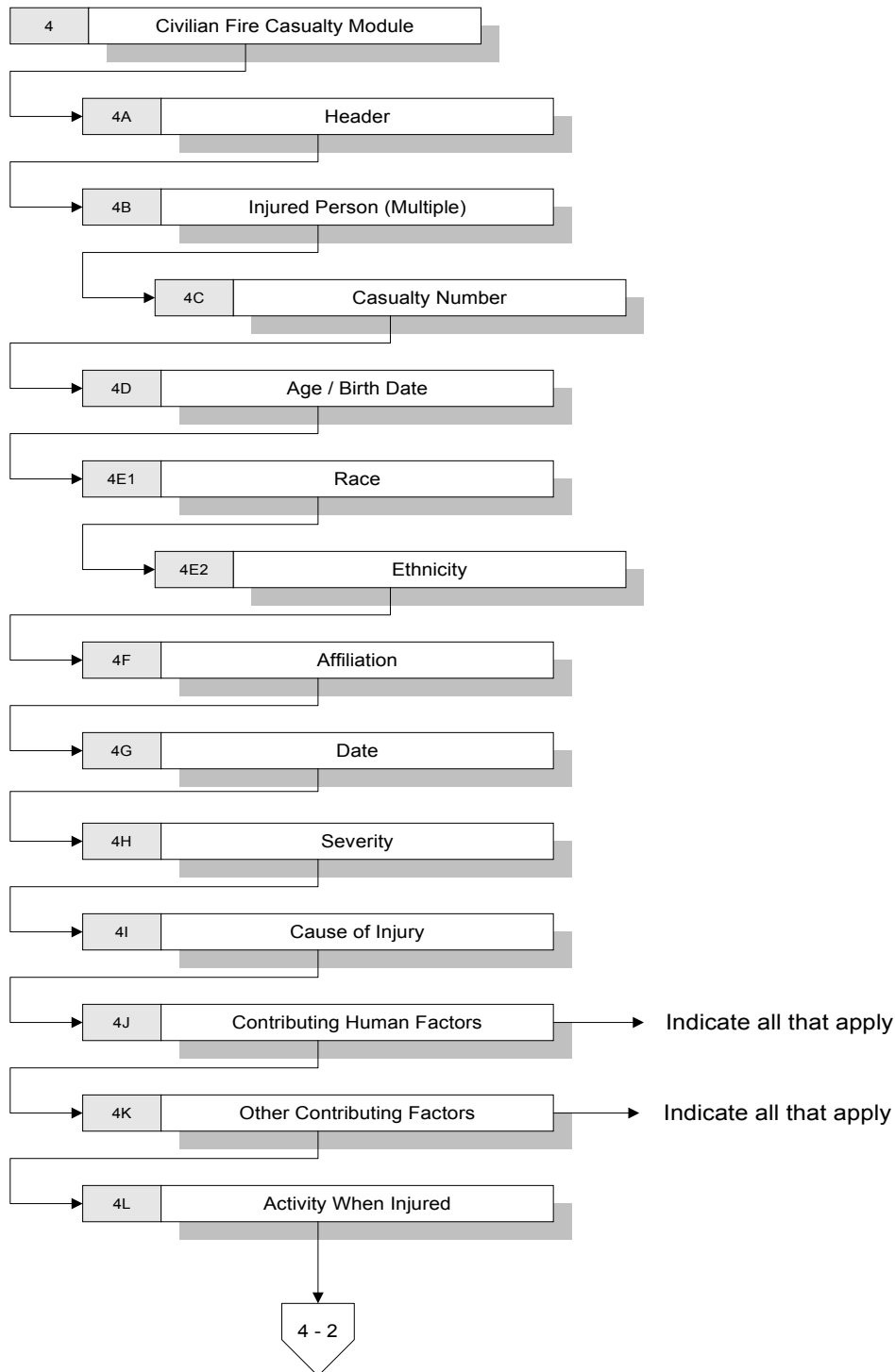


FIGURE 3-25. Civilian Fire Casualty Module Logic Flow (continued)

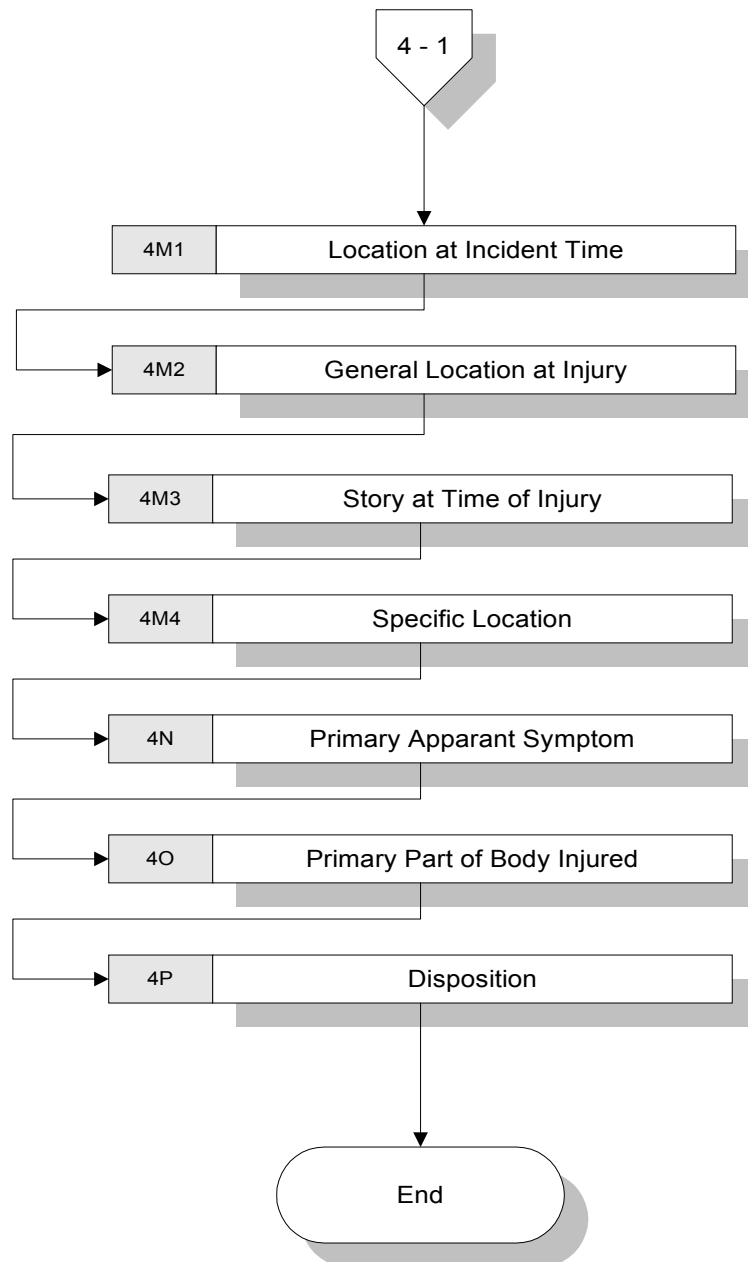


FIGURE 3-26. Fire Service Casualty Module Logic Flow

Fire Service Casualty Module Flow

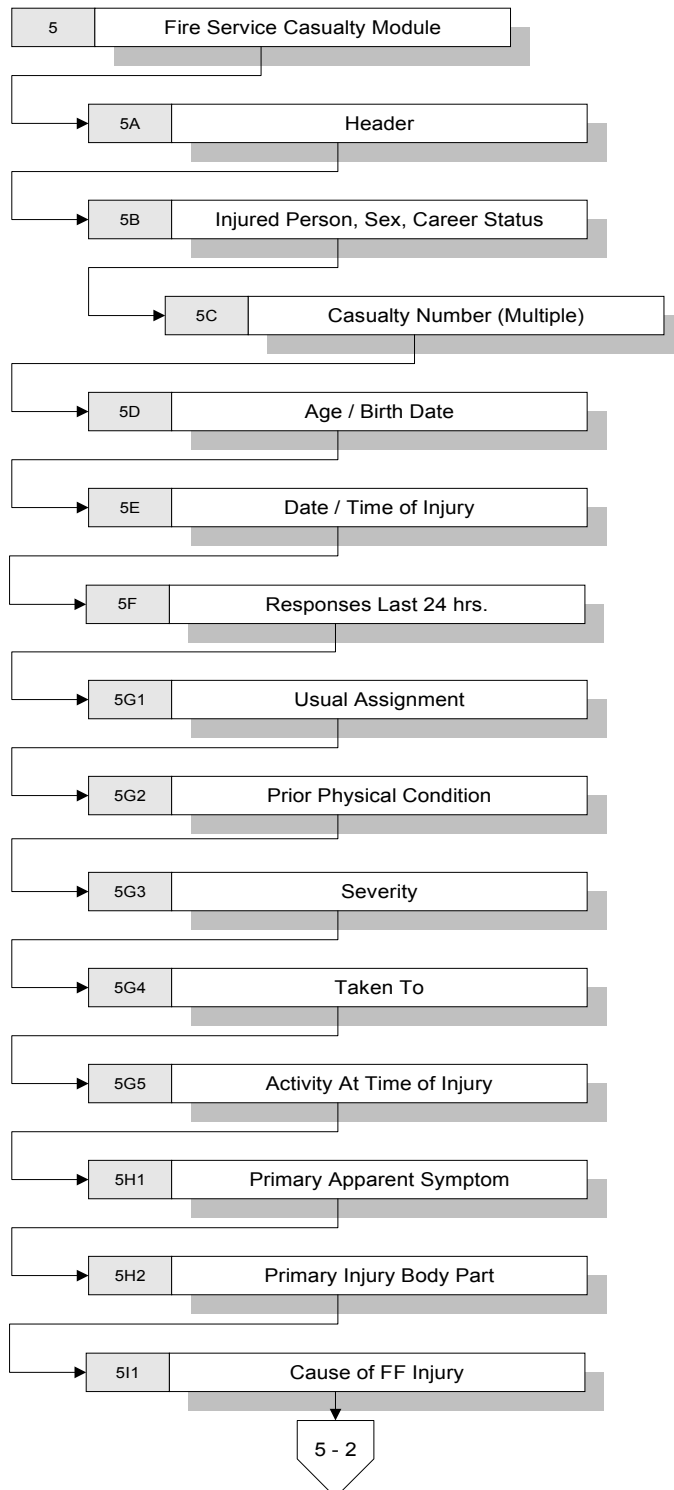


FIGURE 3-27. Fire Service Casualty Module Logic Flow (continued)

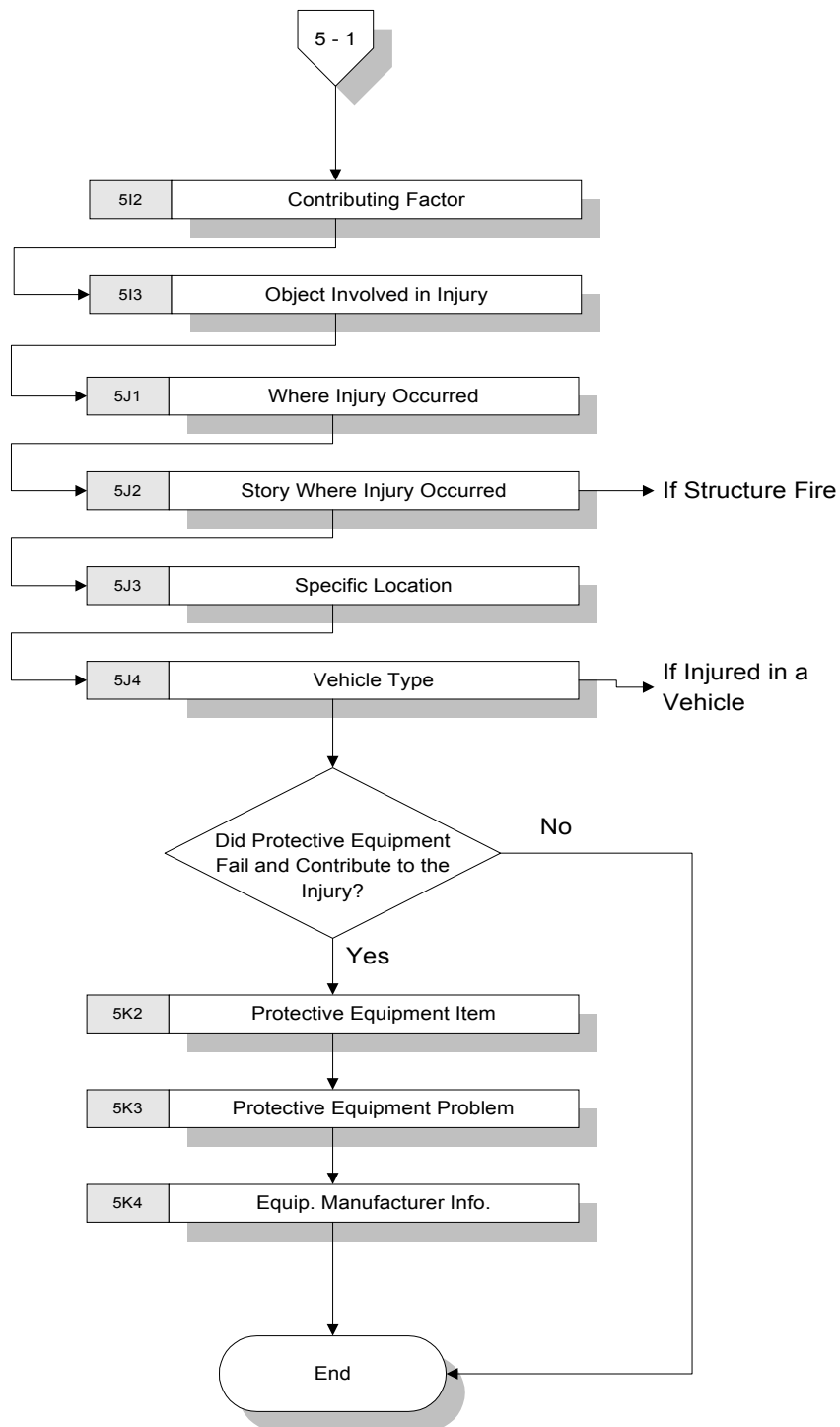


FIGURE 3-28. Emergency Medical Services Module Logic Flow

EMS Module Flow

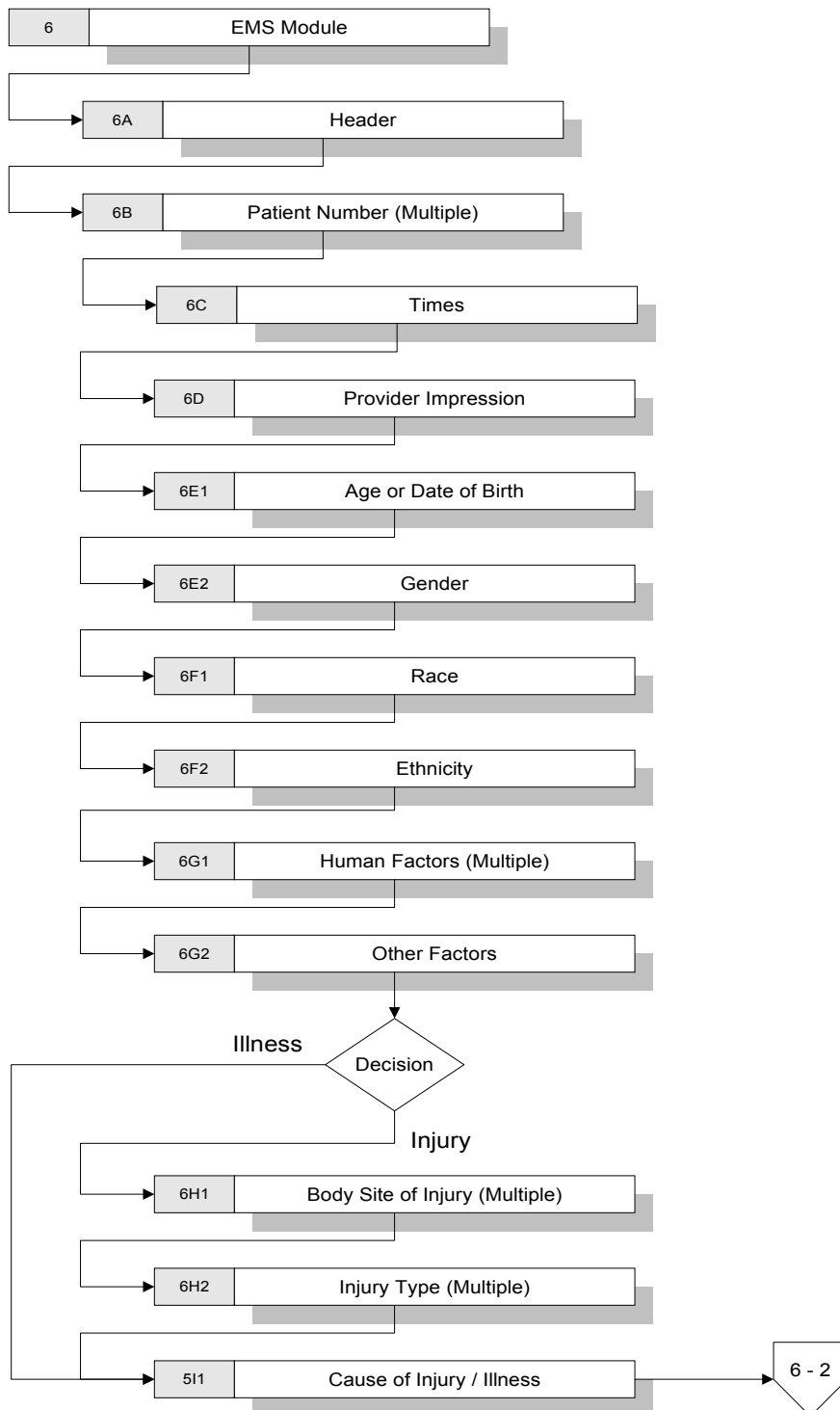


FIGURE 3-29. Emergency Medical Services Module Logic Flow (continued)

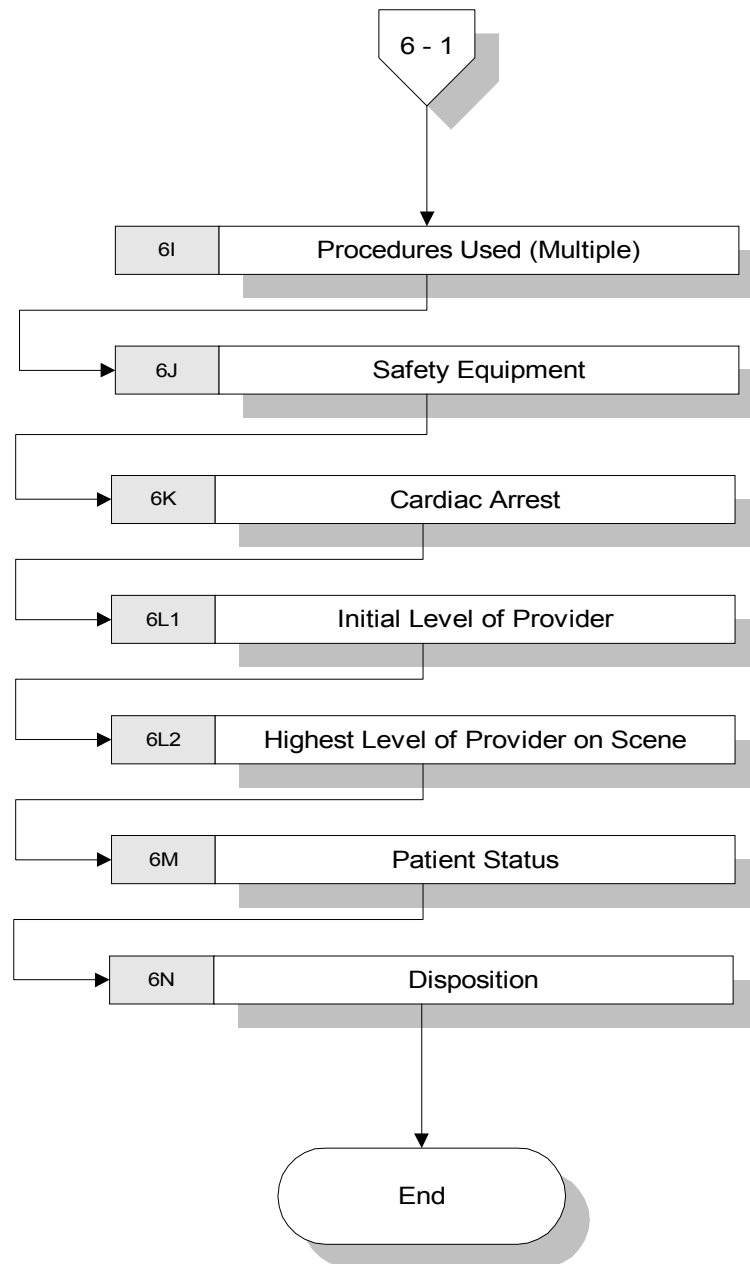


FIGURE 3-30. Hazardous Materials Module Logic Flow

HazMat Module Flow

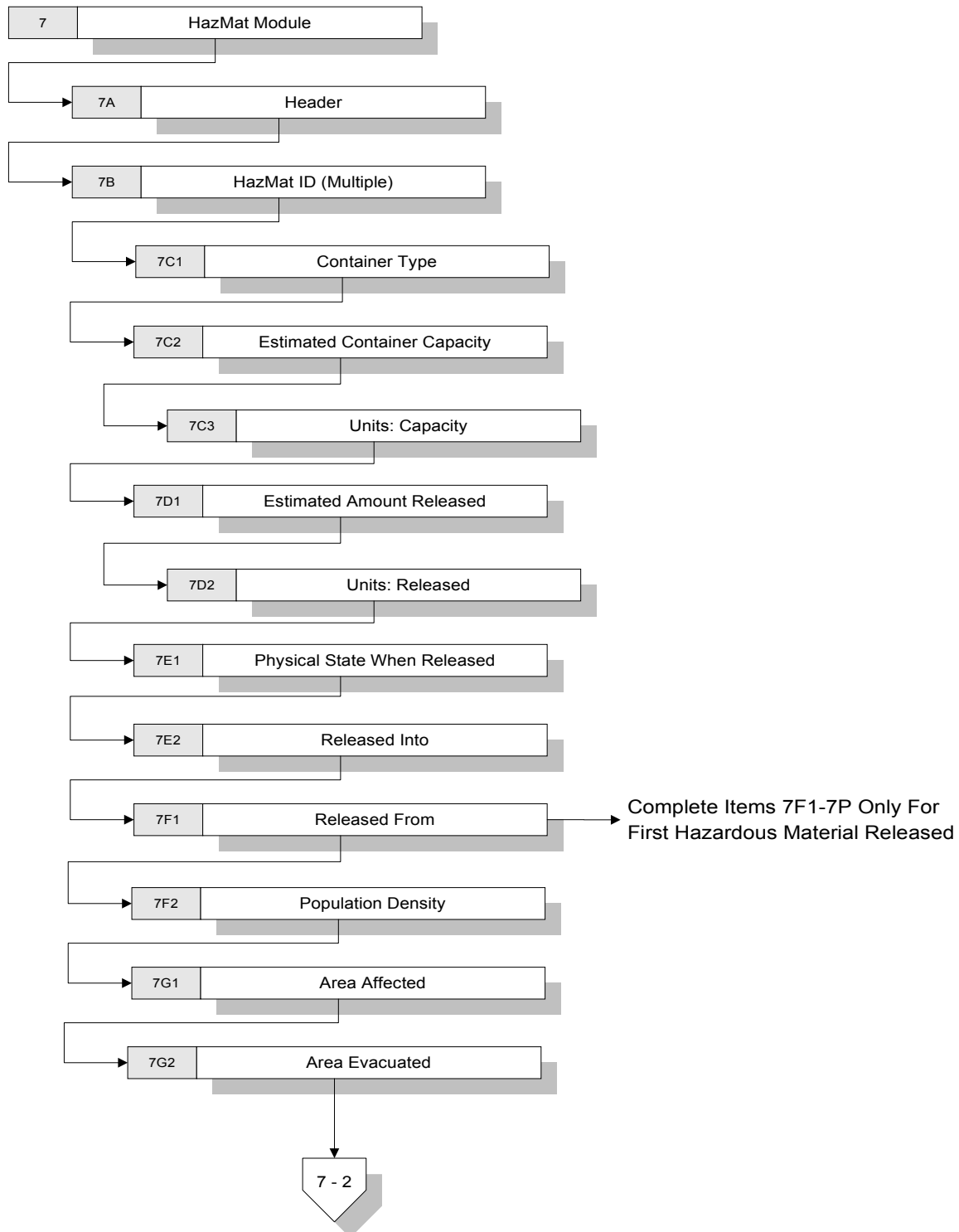


FIGURE 3-31. Hazardous Materials Module Logic Flow (continued)

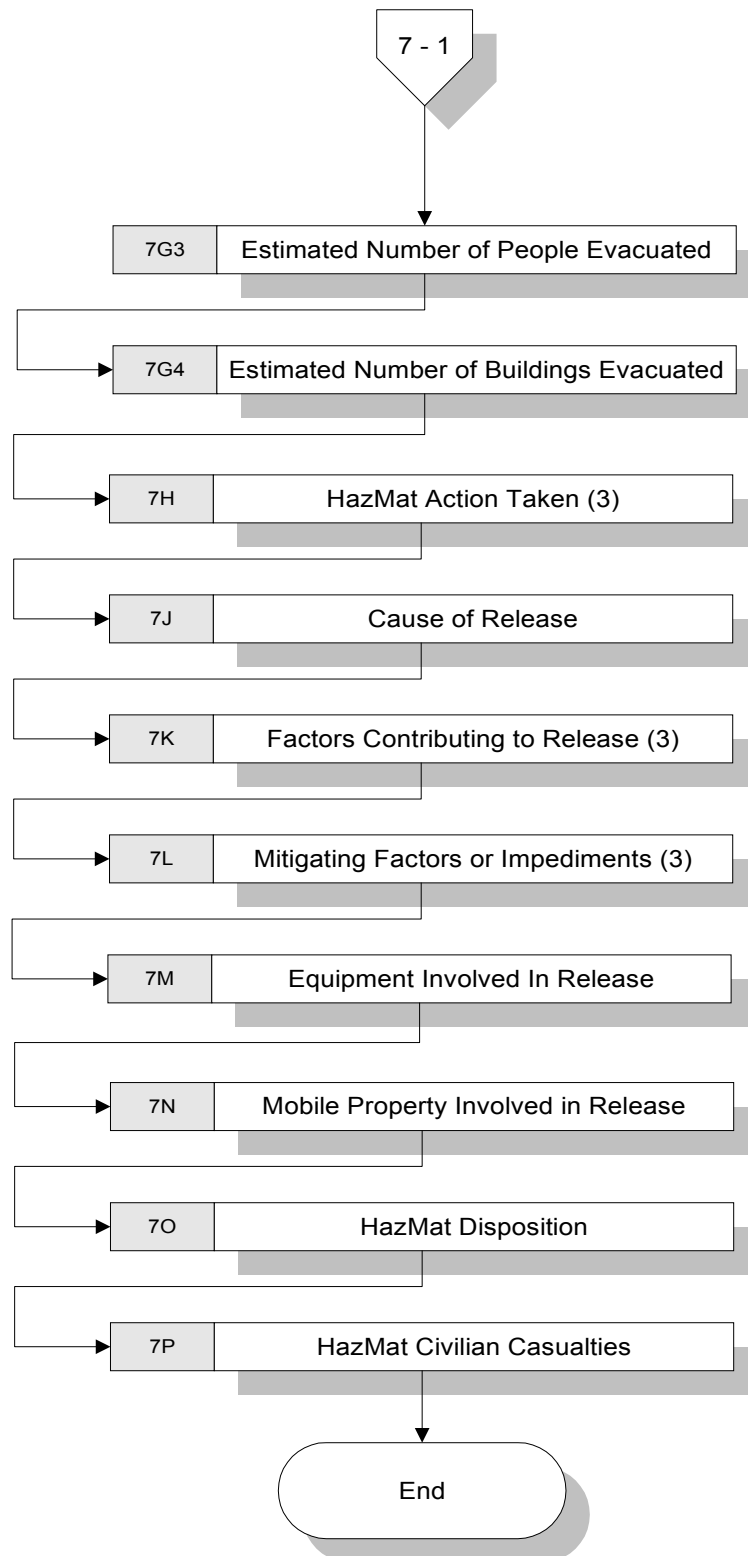


FIGURE 3-32. Wildland Fire Module Logic Flow

Wildland Fire Module Flow

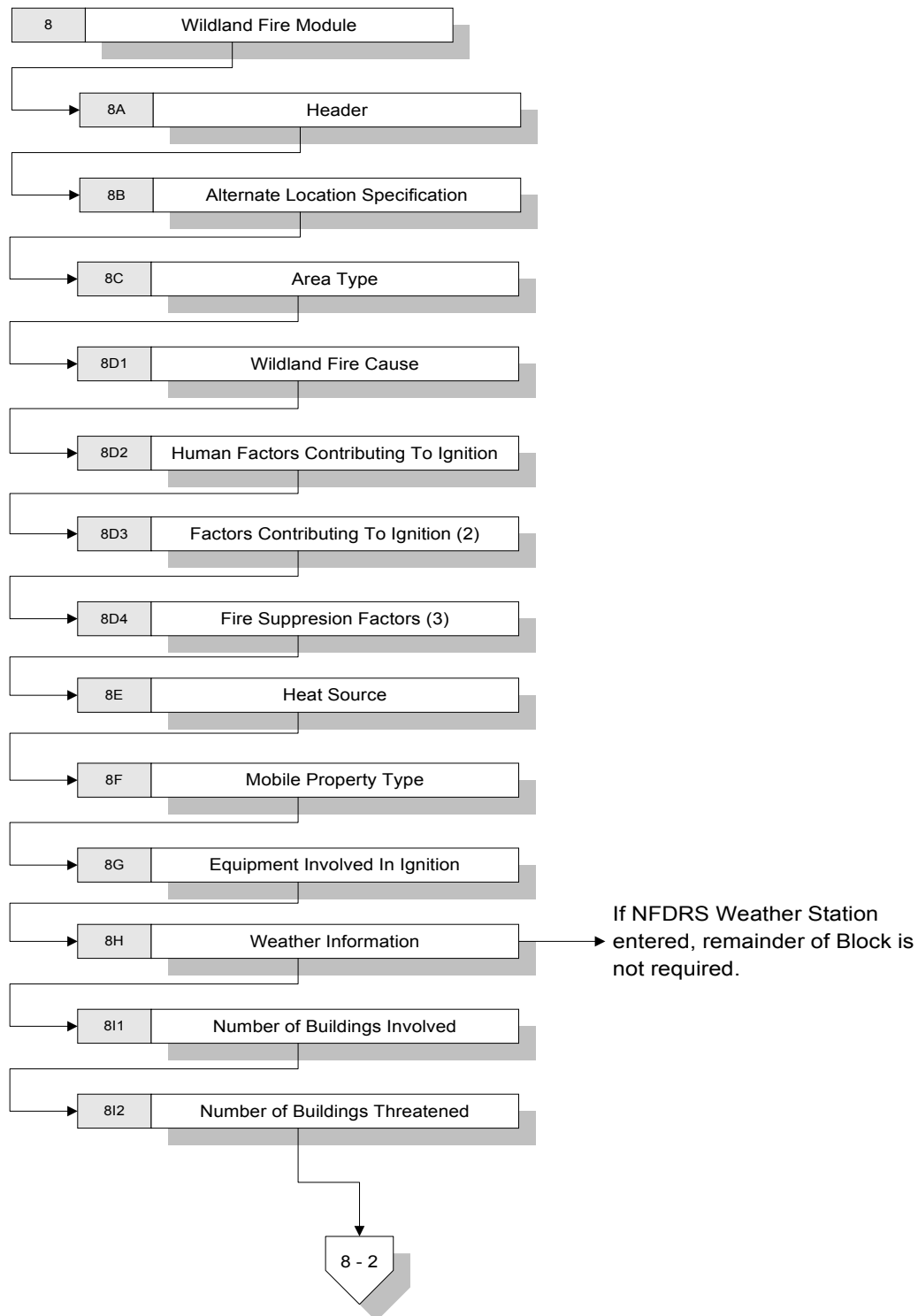


FIGURE 3-33. Wildland Fire Module Logic Flow (continued)

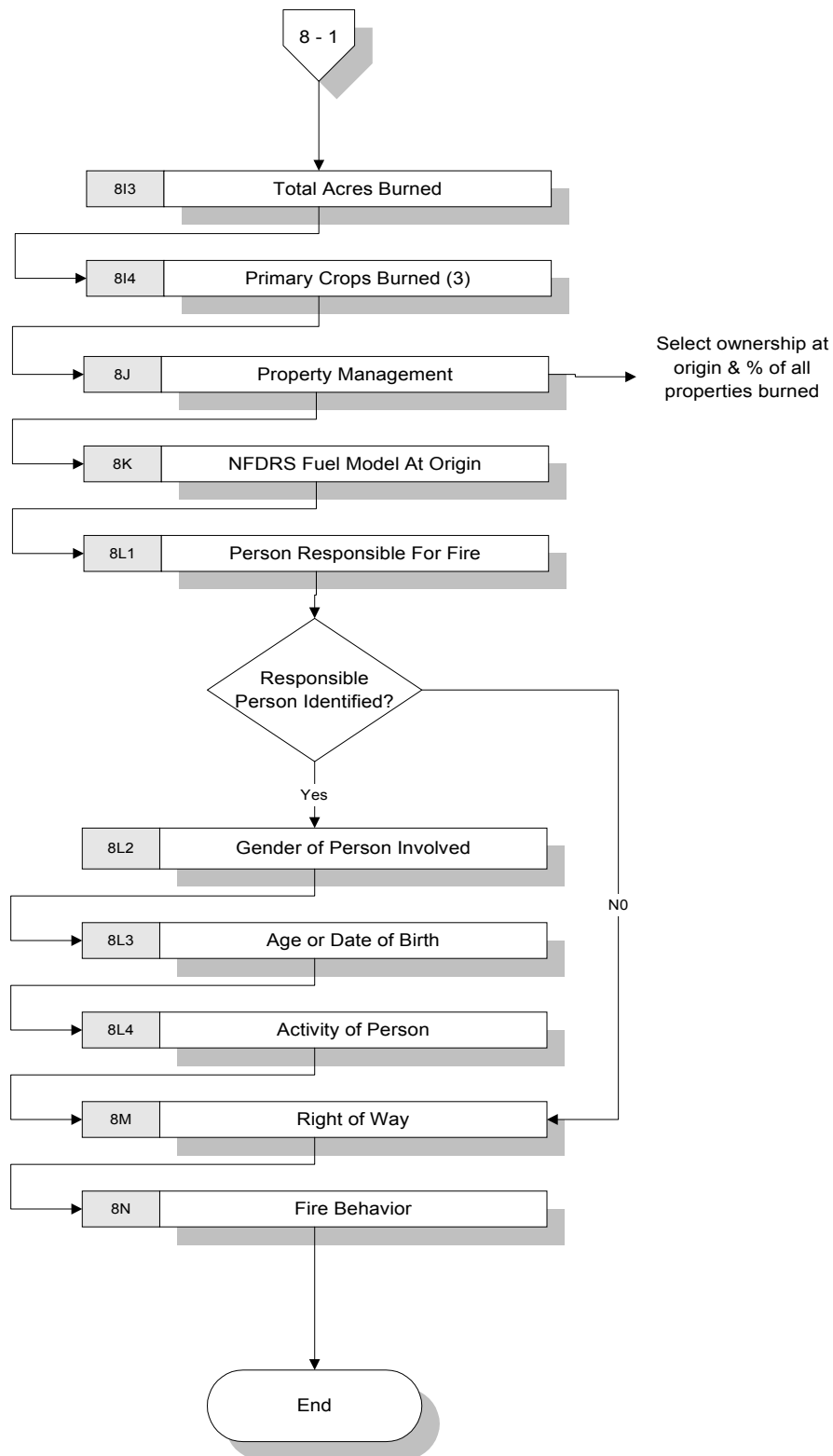


FIGURE 3-34. Apparatus or Resources Module Logic Flow

Apparatus or Resources Module Flow

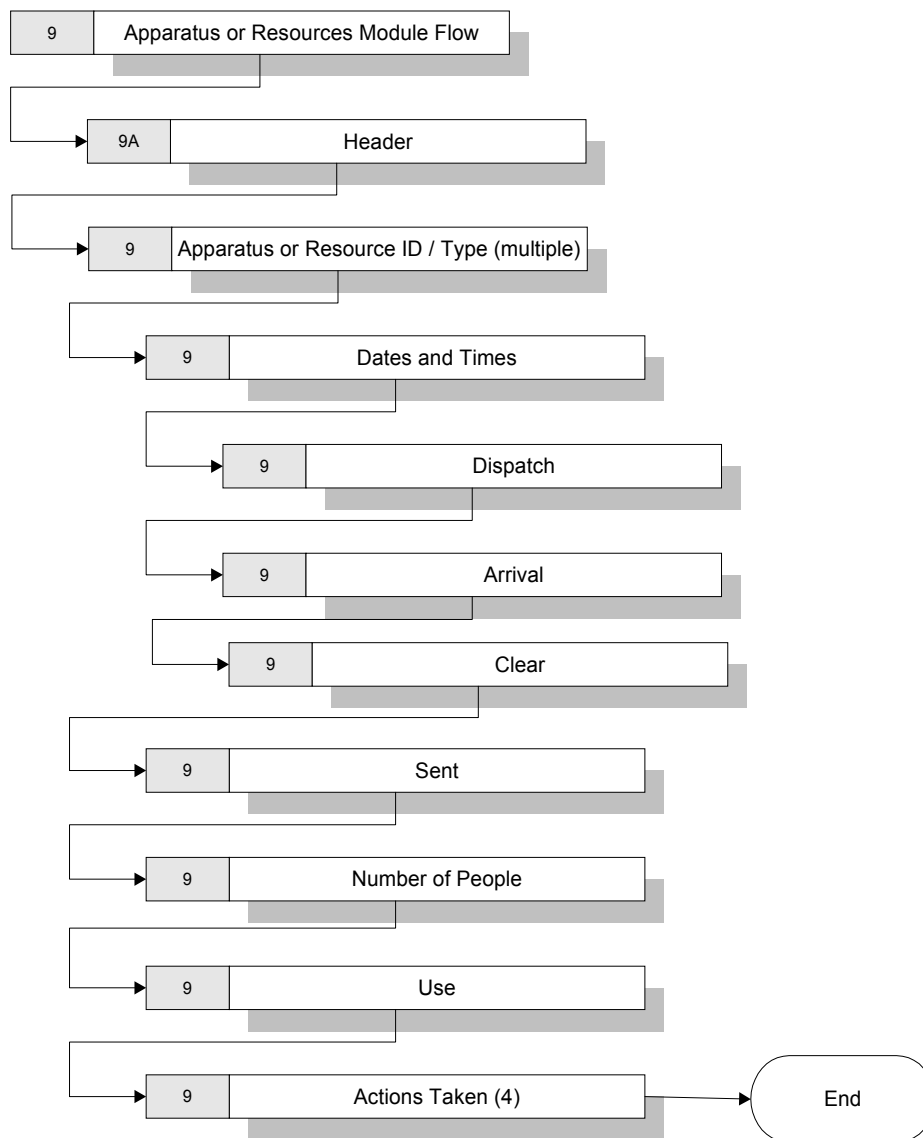


FIGURE 3-35. Personnel Module Logic Flow

Personnel Module Flow

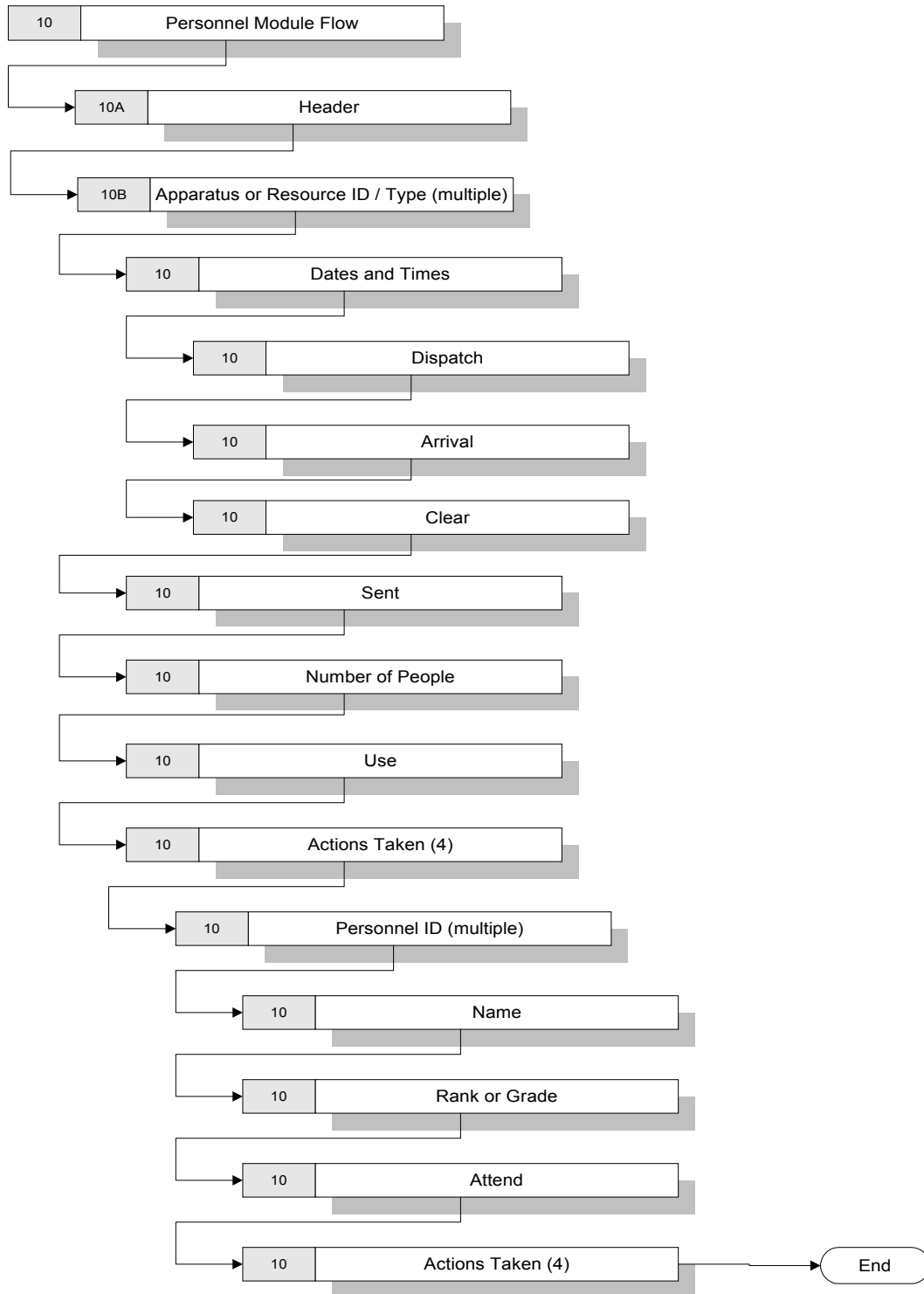


FIGURE 3-36. Arson Module Flow

Arson Module Flow

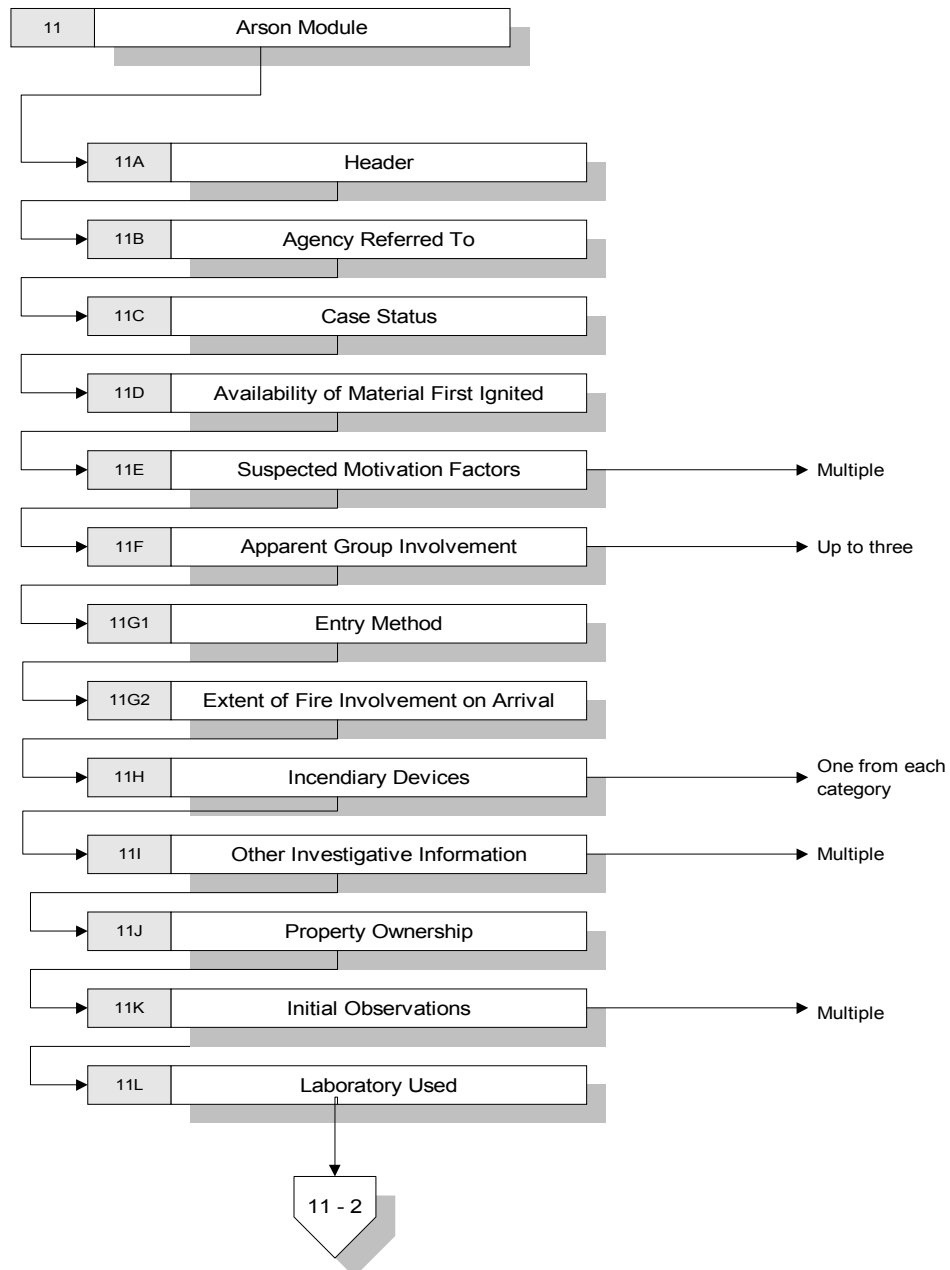


FIGURE 3-37. Arson Module Flow (continued)

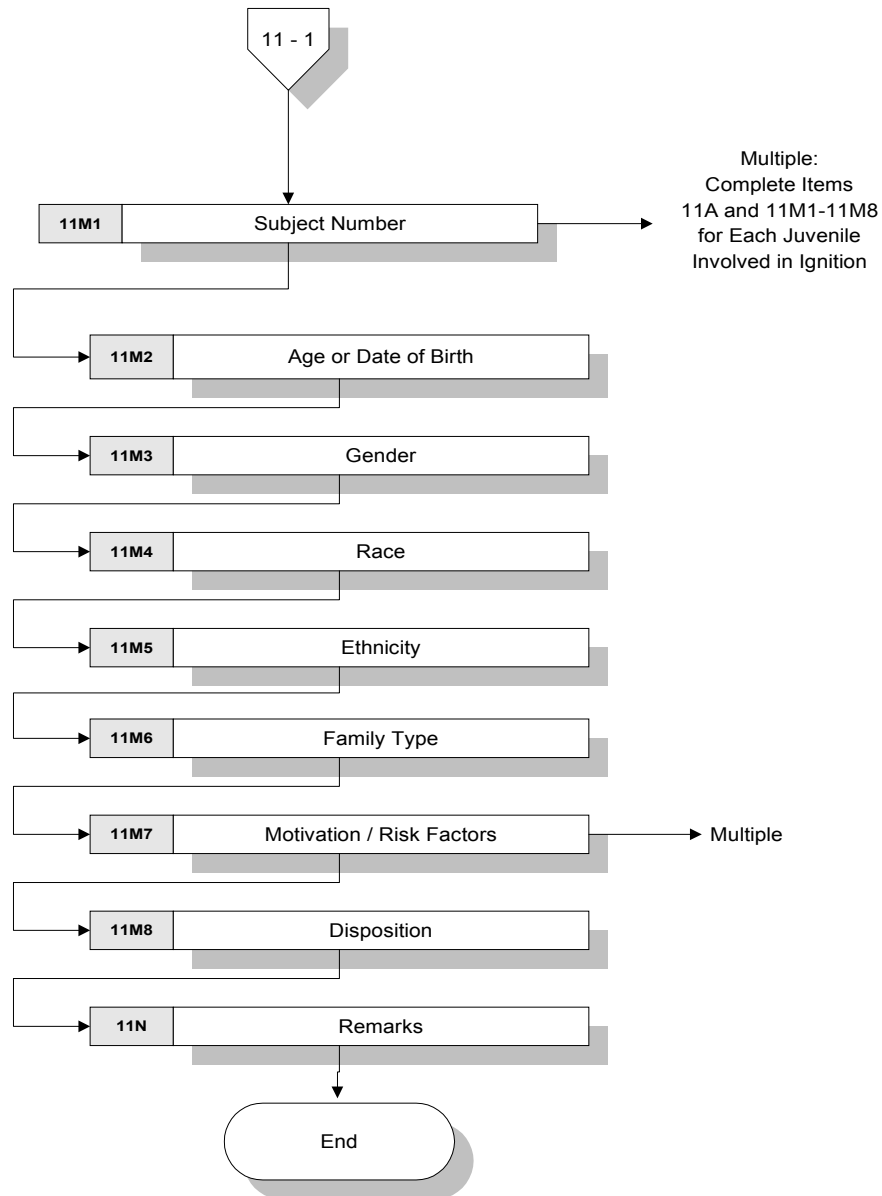
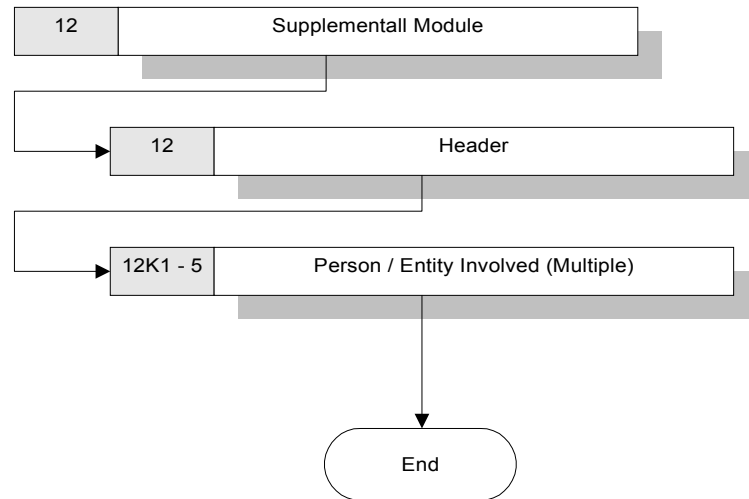


FIGURE 3-38. Supplemental Module Flow

Supplemental Module Flow



Edit Requirements

This section defines all edit requirements for the NFIRS 5.0 system.

The edit requirements are divided into two sections, the Base Edit Requirements, which begin on the following page, and the Relational Edit Requirements which begin on page 98.

Each field in the Base Edit Requirements that has an associated Relational Edit Requirement lists the number of the cross referenced edit in the “Cross Edits” column of the Base Edit Requirements.

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 1 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
1 Basic Module						Y					Required for all incidents
									1		
1	A	D	State	2	C	K	State ID	Valid code			
1	A	D	FDID	5	X	K	Dept. ID				
1	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field)
1	A	D	Station	3	X		Station				
1	A	D	Incident Number	7	N	K		Numeric			Record key must be unique
1	A	D	Exposure	3	N	K	0	Numeric, sequential	2		
1	A	D	Delete/Change/No Activity this Month	1	C		Blank	Blank, 1, 2, 3	3, 4		Blank = add; If code = 3 (No activity), then complete only key fields and alarm date
1	B		Location			Y					Select B should be left blank if Wildland - Alternate Location is used.
1	B	D	Wildland Address Elsewhere flag	1	Y	D	N	Y or N	5, 133	Module Wild- land -Alternate Location Specifi- cation	
1	B	D	Location Type	1	C	Y	Blank	Blank; valid codes	6		
1	B	D	Census Tract	6	X		Blank	Valid Tract			Carry to USFA if collected
1	B	D	Number/Milepost	8	X		Blank				
1	B	D	Street Prefix Direction	2	C		Blank	Valid code			Use table
1	B	D	Street or Highway Name	30	X	Y	Blank	Alpha/numeric			Wildland flag \diamond true
1	B	D	Street Type	4	C		Blank				
1	B	D	Street Suffix	2	X		Blank	Valid code			
1	B	D	Apt or Suite	15	X		Blank	Alpha/numeric			
1	B	D	City	20		Y	Blank	Alphabetic			
1	B	D	State	2	C	Y	Blank	Valid table			
1	B	D	Zip	9	N	Y	Null	Numeric			
1	B	D	Cross Street or Direc- tions	30	X		Blank	Alpha/numeric		Address Type	Required when Street Type is "Intersection".
1	C	D	Incident Type	4	C	Y	Blank	Valid codes	7-20, 106, 165		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 2 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
1	D		Aid Given / Received								
1	D	D	Aid Type	1	C	Y	None	Valid 1, 2, 3, 4, 5, N	21		National codes plus one digit (NL).
1	D	D	FDID Receiving Aid	5	X		Blank		Aid Given or Received must be 3 or 4	Aid Type	
1	D	D	State	2	C		Current state code	Valid State Abbreviation	Aid Given or Received must be 3 or 4	Aid Type	
1	D	D	Incident Number of Receiving Aid	7	N		Blank		Aid Given or Received must be 3 or 4	Aid Type	Their Incident number.
1	E1		Dates & Times								
1	E1	D	Alarm Date	8	N	K	YYYYMDD/Blank	YYYYMMDD	22 thru 24		
1	E1	D	Alarm Time	6	N	Y	HHMMSS	000000-235959	22 thru 24		Valid time; if seconds are not collected then they must be zero (00).
1	E1	S	Arrival Date flag	1	Y		Same date - true				
1	E1	D	Arrival Date	8	N	Y	YYYYMDD/Blank	Valid date, Incident Type <> 611	25, 26		Incident Type 611 (canceled en route).
1	E1	D	Arrival Time	6	N	Y	HHMMSS	000000-235959	25, 26		Valid time; if seconds are not collected then seconds must be zero (00). Incident Type 611 (canceled en route).
1	E1	S	Controlled Date flag	1	Y		Same date - true			Incident Type	
1	E1	D	Controlled Date	8	N		YYYYMDD/Blank	Valid date, Incident Type <> 611, Incident Type = 1XX or 561, 631, 632	27	Incident Type, Wildland Module	Required if Wildland Module present unless aid given.
1	E1	D	Controlled Time	6	N		HHMMSS	Valid time, Incident Type <> 611, Incident Type = 1XX or 561, 631, 632	27	Incident Type, Wildland Module	Required if Wildland Module present unless aid given. Valid time; if seconds are not collected then they must be zero (00).
1	E1	S	Last Unit Cleared Date Flag	1	Y		Same date - true			Incident Type	
1	E1	D	Last Unit Cleared Date	8	N		YYYYMDD/Blank	YYYYMMDD	28	Incident Type	
1	E1	D	Last Unit Cleared Time	6	N		HHMMSS	000000-235959	29	Incident Type	Valid time; if seconds are not collected then they must be zero (00).
1	E2	D	Shifts or Platoon	1	X		Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 3 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
1	E2	D	Alarms	2	X		Blank				
1	E2	D	District	3	X		Blank				
1	E3	D	Special Study #1	4	X		Blank				When Needed
1	E3	D	Special Study #2	4	X		Blank				
1	F	D	Actions Taken #1	3	C	Y	Blank	Valid codes	30	Incident Type	Need to relate Actions Taken with Incident Type. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	F	D	Actions Taken #2	3	C		Blank	Valid codes	31	Incident Type	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	F	D	Actions Taken #3	3	C		Blank	Valid codes	32	Incident Type	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	G1		Resources			Y					
1	G1	D	Resource Form Use flag	1	Y	D	Blank	Y, N, Blank		Apparatus or Personnel Modules	
1	G1	D	Suppression Apparatus	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Suppression Personnel	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	EMS Apparatus	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	EMS Personnel	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Other Apparatus	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Other Personnel	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Resource Count Includes Aid Received flag	1	Y		Blank	Y, N		Aid Received 1 or 2	Aid = 1 or 2.
1	G2		Estimated Dollar Losses & Values								
1	G2	D	Property \$ Loss	9	N		Null	Numeric		Incident Type	Required for Incident Type = fire (1xx), confirm if \$Loss > \$500,000.
1	G2	S	Property Loss-None Flag	1	Y	D	Blank	Y or N			If true, then \$Loss Value = 0.
1	G2	D	Contents \$ Loss	9	N		Null	Numeric		Incident Type	Required for Incident Type = fire (1xx), confirm if \$Loss Value > \$500,000.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 4 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
1	G2	S	Contents Loss-None Flag	1	Y	D	Blank	Y or N			If true, then \$Loss Value = 0.
1	G2	D	Pre-Incident Property Value	9	N		Null	Numeric	33		
1	G2	S	Pre-Incident Property None Flag	1	Y	D	Blank	Y or N			If true, then \$Loss Value = 0.
1	G2	D	Pre-Incident Contents Value	9	N		Null	Numeric	34		
1	G2	S	Pre-Incident Contents None Flag	1	Y	D	Blank	Y or N			If true, then \$Loss Value = 0.
1	H	S	System Module flags - Fire	1	Y	D	N = No Information	Y or N		Fire Module	Information Only.
1	H	S	System Module flags - Structure	1	Y	D	N = No Information	Y or N		Structure Module	Information Only.
1	H	S	System Module flags - Hazmat	1	Y	D	N = No Information	Y or N		HazMat Module	Information Only.
1	H	S	System Module flags - Wildland	1	Y	D	N = No Information	Y or N		Wildland Module	Information Only.
1	H	S	System Module flags - Civilian Fire Casualty	1	Y	D	N = No Information	Y or N		Civilian Casualty Module	Information Only.
1	H	S	System Module flags - Fire Service	1	Y	D	N = No Information	Y or N		Fire Service Module	Information Only.
1	H	S	System Module flags - Apparatus	1	Y	D	N = No Information	Y or N		Apparatus Module	Information Only.
1	H	S	System Module flags - Personnel	1	Y	D	N = No Information	Y or N		Personnel Module	Information Only.
1	H	S	System Module flags - EMS	1	Y	D	N = No Information	Y or N		EMS Module	Information Only.
1	H	S	System Module Flags - Arson	1	Y	D	N = No Information	Y or N		Arson Module	Information Only.
1	H1		Casualties		Y						Required Section
1	H1	S	Casualties-None flag	1	Y	D	Blank	Y or N; no casualty module present	35	Casualty Modules	Civilian Fire Casualty Module is required only for Fire Incidents.
1	H1	D	Fire Service Deaths	3	N	D	Null	Numeric	93	Fire Service Module	

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 5 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
1	H1	D	Fire Service Injuries	3	N	D	Null	Numeric	93	Fire Service Module	
1	H1	D	Other Deaths	3	N	D	Null	Numeric		Civilian Casualty Module	
1	H1	D	Other Injuries	3	N	D	Null	Numeric		Civilian Casualty Module	
1	H2	D	Detector Alerted Occupants	2	C		Blank	Valid Code		Incident Type	National Codes plus one digit (NL): display National field lengths unless local option character is defined.
1	H3	D	HazMat Released	2	C		None	Valid code		HazMat Module	Trigger hazmat module for code 0 (zero) national codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	I	D	Mixed Use	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	J	D	Property Use	4	C	Y	Blank	Valid code	36, 37		National Codes plus one digit (NNNL): display National field lengths unless local option character is defined. Not required when aid given.
1	K1		Person/Entity Involved								
1	K1	D	Business Name	25	X		Blank				
1	K1	D	Telephone Number	10	N		Blank				
1	K1	D	Name Prefix	3	X		Blank	Alphabetic			
1	K1	D	First Name	15	X		Blank				
1	K1	D	MI	1	X		Blank				
1	K1	D	Last Name	25	X		Blank				
1	K1	D	Name Suffix	4	X		Blank				
1	K1	S	Same Address as Incident flag	1	Y		No	Y or N		Location (B)	
1	K1	D	Number/Milepost	8	X		Blank				
1	K1	D	Prefix	2	C		Blank	Valid code			
1	K1	D	Street or highway	20	X		Blank				
1	K1	D	Street Type	4	C		Blank	Valid code			
1	K1	D	Street Suffix	2	C		Blank	Valid code			
1	K1	D	Apt. or Suite	15	X		Blank				
1	K1	D	City	20	X		Blank	Alphabetic			
1	K1	D	State	2	C		Blank	Valid code			
1	K1	D	Zip	9	N		Null	Numeric			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 6 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
1	K1	D	P. O. Box	10	X		Blank				
1	K1	S	More People Involved Record flag	1	Y		No	Y or N			Additional Person/Entity Involved Records needed.
1	K2		Owner								
1	K2	S	Same Person Involved flag	1	Y	D	No = Not Same	N		Person/Entity Involved (Line K1)	If flag = true, then fill Owner Involved fields with same values as Person/Entity Involved fields.
1	K2	D	Business Name	25	X		Blank				
1	K2	D	Telephone Number	10	N		Blank				
1	K2	D	Name Prefix	3	X		Blank				
1	K2	D	First Name	15	X		Blank				
1	K2	D	MI	1	X		Blank				
1	K2	D	Last Name	25	X		Blank				
1	K2	D	Name Suffix	4	X		Blank				
1	K2	S	Same Address as Incident flag	1	Y	D	No = Not Same	Y or N		Location (Line B)	If flag = true, then fill Owner Address fields with same values as Incident Address fields.
1	K2	D	Number/Milepost	8	X		Blank				
1	K2	D	Prefix	2	C		Blank	Valid code			
1	K2	D	Street or highway	20	X		Blank				
1	K2	D	Street Type	4	C		Blank	Valid code			
1	K2	D	Street Suffix	2	C		Blank	Valid code			
1	K2	D	Apt. or Suite	15	X		Blank				
1	K2	D	City	20	X		Blank	Alphabetic			
1	K2	D	State	2	C		Blank	Valid code			
1	K2	D	Zip	9	N		Blank	Numeric			
1	K2	D	P. O. Box	10	X		Blank				
1	L1	S	Remarks	255	X						This is just a pointer to the remarks data.
1	L1	I	More remarks								Flag for paper system only.
1	L2	I	Fire Form Required?								Instructional Information only.
1	M		Authorization								
1	M	D	Officer in Charge ID	9	X		Blank				
1	M	D	Last Name, Officer in Charge	25	X		Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 7 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
1	M	D	First Name, Officer in Charge	15	X		Blank				
1	M	D	Middle Initial, Officer in Charge	1	X		Blank				
1	M	D	Position or rank, Officer in Charge	10	X		Blank				
1	M	D	Assignment, Officer in Charge	10	X		Blank				
1	M	D	Date, Officer in Charge	8	N		Alarm date	Valid date			
1	M	S	Same as Officer flag	1	Y		No	Y or N			
1	M	D	Member Making Report ID	9	X		Blank				
1	M	D	Last Name, Member Making Report	25	X		Blank				
1	M	D	First Name, Member Making Report	15	X		Blank				
1	M	D	Middle Initial, Member Making Report	1	X		Blank				
1	M	D	Position or rank, Member Making Report	10	X		Blank				
1	M	D	Assignment, Member Making Report	10	X		Blank				
1	M	D	Date, Member Making Report	8	N		Blank	YYYYMMDD			
1		S	Vender Identification Number	5	N		Blank				
1		D	NFIRS Version Number	2.2	F						
2	Fire Module							Incident Type=1xx	38, 39	Incident Type	Required module if applicable; Incident Type Code must be a fire
2	A	D	State	2	C	K	State ID	Valid code			
2	A	D	FDID	5	X	K	Dept. ID				
2	L	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
2	A	D	Station	3	X		Station				
2	A	D	Incident Number	7	N	K		Numeric			Record key must be unique.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 8 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
2	A	D	Exposure	3	N	K	0	Numeric, sequential			
2	A	D	Delete/Change	1	X	K	Blank	Blank, 1,2,3			
2	B		Property Detail								
2	B1	D	Not Residential flag	1	Y	D	Blank	Y or N		# of residential units; Property Use	
2	B1	D	Number of Residential units	4	N	D	Null	Numeric	40		
2	B2	D	# of Bldg. Involved	3	N		Null	Numeric	41, 42, 70		This field for exposure records must be zeroes.
2	B2	S	Bldg. not Involved flag	1	Y	D	Blank	Y or N		# of Buildings Involved	
2	B3	D	Acres Burned	6	N	D	Null	Numeric	43, 44, 136		Collected for each exposure fire (if any).
2	B3	D	Acres Burn None/Less than one acre	1	N		Blank	Blank or valid code		# of Acres Burned	
2	B3	S	Acres Burn from Wildland Form	1	Y	D	No = none	Y or N			Trigger the Wildland Form.
2	C		On-Site Materials or Products								
2	C	S	On Site Materials or Products None flag	1	Y	D	Blank	Y or N		On-site material #	None = 99 (See Notes).
2	C	D	Material # 1	4	C		Blank	Valid code	45	On-Site flag	If flag = false, then required. National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	C	D	Storage Use #1 (BPPR)	2	C		Blank	1,2,3,4	46	On-Site Material	If Flag = false then required. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	C	D	Material # 2	4	C		Blank	Valid code	45	On-Site flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	C	D	Storage Use #2 (BPPR)	2	C		Blank	1, 2, 3, 4	46	On-Site Material	If Flag = false then required. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	C	D	Material # 3	4	C		Blank	Valid code	45	On-Site flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	C	D	Storage Use #3 (BPPR)	2	C		Blank	1, 2, 3, 4	46	On-Site Material	If Flag = false then required. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2			Ignition								
2	D1	D	Area of Fire Origin	3	C	Y	Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 9 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
2	D2	D	Heat Source	3	C	Y	Blank	Valid code	47		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	D3	D	Item First Ignited	3	C	Y	Blank	Valid code	48, 49		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	D3a	S	Check box if fire is confined to object of origin	1	C		Blank	Valid Code			If this box is checked then add Code #1 to Module 3 J2 Fire Spread.
2	D4	D	Type of Material	3	C		Blank	Valid code	50	Item first ignited < 70 or = 00	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	E1		Cause of Ignition								
2	E1	S	Exposure Report flag	1	Y	D	Blank	Y or N			Check to see if Exposure is greater than 000.
2	E1	D	Cause of Ignition	2	C	Y	Blank	Valid code	51, 52, 53	Factor Contributing	Blank when exposure is greater than 0. National codes plus one digit (NL): display national field lengths unless local option character is defined.
			Factor Contributing to Ignition								
2	E2	S	Factor Contributing None	1	Y	D	Blank	Y or N		Exposure No.	
2	E2	D	Factor Contributing to Ignition (1)	3	C		Blank	Valid code	54, 55, 56	Factor flag	If Exposure > 0 then Code = 71 and Factor Contributing flag is true. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	E2	D	Factor Contributing to Ignition (2)	3	C		Blank	Valid code	54, 55, 56	Factor flag	If Exposure > 0 then Code = Blank and Factor Contributing flag is true. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	E3		Human Factors								
2	E3	D	Human Factors Contributing None	1	C	D	Blank	Code = N	57, 58	Human Factors Contributing	
2	E3	D	Human Factor - Asleep	2	C	D	Blank	Code = 1		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Impaired by Alcohol	2	C	D	Blank	Code = 2		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Unattended person	2	C	D	Blank	Code = 3		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Mentally disabled	2	C	D	Blank	Code = 4		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Physically disabled	2	C	D	Blank	Code = 5		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Multiple persons.	2	C	D	Blank	Code = 6		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 10 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
2	E3	D	Human Factor - Estimated Age related	2	C	D	Blank	Code = 7	59	Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Estimated Age of Person Involved	3	N		Null	Numeric entry <150	59		
2	E3	D	Sex of Person Involved	1	C		Blank	Valid Code	59		
2	F		Equipment Involved								
2	F1	D	Equipment Involved in Ignition flag	1	Y	D	Blank	Y or N	60	Equip Involved	
2	F1	D	Equipment Involved	4	C		Blank	Valid code	60	Equip flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	F1	D	Brand	25	X		Blank			Equip flag	
2	F1	D	Model	25	X		Blank			Equip flag	
2	F1	D	Serial #	25	X		Blank			Equip flag	
2	F1	D	Year	4	X		Null	Numeric		Equip flag	
2	F2	D	Equipment Power Source	3	C		Blank	Valid code	60	Equip flag	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	F3	D	Equipment Portability	2	C		Blank	Valid code	60	Equip flag	1 = portable; 2 = stationary National codes plus one digit (NL): display national field lengths unless local option character is defined.
2	G		Suppression flag Factors								
2	G	D	Suppression None flag	1	Y	D	Blank	Y or N	61, 63	Fire Suppression/ Incident Type	
2	G	D	Factor #1	4	C		Blank	Valid code	62	Fire Suppression flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	G	D	Factor #2	4	C		Blank	Valid code	62	Fire Suppression flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	G	D	Factor #3	4	C		Blank	Valid code	62	Fire Suppression flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	H		Mobile Property								
2	H1	S	Mobile Property None flag	1	C	D	Blank		64		If true, Mobile Property Involved Code = "N"
2	H1	D	Mobile Property Involve & Type	2	C		Blank	Valid code	65		National codes plus one digit (NL): display national field lengths unless local option character is defined.
2	H2	D	Mobile Property Type	3	C		Blank	Valid code	65		National codes plus one digit (NNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 11 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
2	H2	D	Mobile Property Make	3	C		Blank	Valid code	65		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	H2	D	Year	4	N		Null	Numeric			
2	H2	D	Model	25	X		Blank				
2	H2	D	License plate #	10	X		Blank				Max at state is 8 with 2 for growth.
2	H2	D	State	2	C		Blank	Valid code			
2	H2	D	VIN #	17	X		Blank				
3			Structure Fire Module					Incident Type = 111, 112 or 12x; Structure Type = 1 or 2			Required module if applicable, Incident Type Code must be a structure file
3	I1	D	Structure Type	2	C	Y	Blank		66, 67, 68	Incident Type	If enclosed building, complete the rest of the module. National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	I2	D	Building Status	2	C	Y	Blank	Valid code	67, 68		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	I3		Building Height								
3	I3	D	Number of Stories at/ above grade	3	N	D	Null	Numeric	67, 90, 92		
3	I3	D	Number of Stories below grade	2	N	D	Null	Numeric	67		
3	I4		Size of Main Floor Area								
3	I4	D	Sq. Feet	8	N	Y	Null	Numeric	67		
3	I4	D	Length	4	N		Null	Numeric	67	Sq. Feet	Convert to square feet.
3	I4	D	Width	4	N		Null	Numeric	67	Sq. Feet	Convert to square feet.
3	J1	D	Floor of Origin	3	N	Y	Blank				
3	J1	D	Story of Origin, Below grade flag	1	Y	D	Blank	Y or N	67	Fire Origin	
3	J2	D	Fire Spread	2	C	Y	Blank	Valid code	67, 69, 70		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	J3		Number of Stories Damaged Flame								
3	J3	D	Minor Damage	3	N		Null	Numeric	67, 71	Minor Damage flag	

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 12 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
3	J3	D	Significant Damage	3	N		Null	Numeric	67, 71	Significant Damage flag	
3	J3	D	Heavy Damage	3	N		Null	Numeric	67, 71	Heavy Damage flag	
3	J3	D	Extreme Damage	3	N		Null	Numeric	67, 71	Extreme Damage flag	
3			Material Contributing to Flame Spread								
3	K	D	Material Contributing None flag	1	Y	D	Blank	Y or N		X1 or X2	
3	K1	D	Item Contributing Most to Spread	3	C		Blank	Valid code	67, 72		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
3	K2	D	Type of Material Contributing Most to Spread	3	C		Blank	Valid code	67, 72, 73		Flag; Item Con. < 70; different materials national codes plus one digit (NNL): display national field lengths unless local option character is defined.
3			Detector Performance								
3	L1	D	Presence of Detectors	2	C	Y	Blank	1, N, U	67, 74		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L2	D	Type of Detection System	2	C		Blank	Valid code	74		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L3	D	Detector Power Supply	2	C		Blank	Valid code	74		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L4	D	Detector Operation	2	C		Blank	Valid code	75, 76		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L5	D	Detector Effectiveness	2	C		Blank	Valid code	75		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L6	D	Detector Failure Reason	2	C		Blank	Valid code	76		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	M		Automatic Extinguishment Systems								
3	M1	D	Presence of AES	2	C	Y	Blank	Valid code	67, 79		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	M2	D	Type of AES	2	C		Blank	Valid code	79		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	M3	D	Operation of Automatic Extinguishing System	2	C		Blank	Valid code	79, 80, 81		National codes plus one digit (NL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 13 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
3	M4	D	Number of Sprinkler Heads Operating	3	N		Null	Numeric	79, 80		
3	M5	D	Reason for AES Failure	2	C		Blank	Valid code	79, 81		National codes plus one digit (NL): display national field lengths unless local option character is defined.
4 Civilian Fire Casualty Module										Required module if civilian fire casualty.	
4	A	D	State	2	C	K	State ID	Valid code			
4	A	D	FDID	5	X	K	Dept. ID				
4	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
4	A	D	Station	3	X		Station				
4	A	D	Incident Number	7	N	K	Blank	Numeric			Record key must be unique.
4	A	D	Exposure	3	N	K	0	N, sequential			
4	A	D	Delete/Change	1	A	K	Blank	Blank, 1,2			Blank = add
4	B		Injured Person								
4	B	D	Gender	1	C	Y	Blank	1, 2			
4	B	D	First Name	15	X		Blank				
4	B	D	Middle Initial	1	X		Blank				
4	B	D	Last Name	25	X		Blank				
4	B	D	Name Suffix	4	X		Blank				
4	C	D	Casualty Number	3	N	K	1 Incremented	Numeric; Sequential			Increment by one for each casualty.
4			Age or Date of Birth								
4	D	D	Age	6	N	Y	Null	Numeric	82	DOB, Months	Age will be NNN.NN
4	D	S	Months for Infants	1	Y		Blank	Y or N			Store months as year.
4	D	S	Date of Birth	8	N		Blank	Valid date		Age	Convert date to age & store
4	E1	D	Race	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	E2	D	Ethnicity, Hispanic	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	F	D	Affiliation	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	G	D	Date of Injury	8	N		Blank	YYYYMMDD	83		Standard date edits.
4	G	D	Time of Injury	6	N		0	0000-235959			Standard time range, if seconds are not provided, then seconds are set to "00".

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 14 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
4	H	D	Severity	2	C	Y	Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	I	D	Cause of Injury	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	J		Human Factors Contributing								
4	J	D	Human Factors None	1	C		Blank		84	If true all other factors must be false	
4	J	D	Asleep	2	C			Code = 1	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Unconscious	2	C		Blank	Code = 2	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Possible Alcohol Involved	2	C		Blank	Code = 3	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Possible Drugs Involved	2	C		Blank	Code = 4	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Mentally Challenged	2	C		Blank	Code = 5	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Physically Challenged	2	C		Blank	Code = 6	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Physically restrained	2	C		Blank	Code = 7	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Unattended person	2	C		Blank	Code = 8	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	K		Factors Contributing to Injury								
4	K	D	Contributing Factors None Box	1	Y		Blank	Y or N	85	Contributing Factor 1	If false than at least one contributing factor.
4	K	D	Contributing Factors 1	3	C		Blank	Valid code	85		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	K	D	Contributing Factors 2	3	C		Blank	Valid code	85, 86		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	K	D	Contributing Factors 3	3	C		Blank	Valid code	85, 87		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	L	D	Activity When Injured	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 15 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
4	M1	D	Location at Time of Incident	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	M2	D	General Location at Time of Injury	2	C		Blank	Valid code	87, 88, 90, 91	M3, M4	National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	M3	D	Story at Start of Injury	3	N		Null	Numeric	89, 90	M2	
4	M3	D	Story at Start of Injury Below Grade flag	1	Y		Blank	Y or N		M2	
4	M4	D	Story where Injury Occurred	3	N		Null	Numeric	91, 92	M2 & Previous field	
4	M4	D	Story where Injury Occurred Below Grade flag	1	Y		Blank	Y or N		M2 & Previous field	
4	M5	D	Specific Location at Time of Injury	3	C		Blank	Valid code	88	M2	Use Area of Origin for valid codes. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	N	D	Primary Apparent Symptom	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	O	D	Primary Part of Body Injured	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	P	D	Disposition	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
Fire Service Casualty Module											Required module if fire service fire casualty.
5	A	D	State	2	C	K	State ID	Valid code			
5	A	D	FDID	5	X	K	Dept. ID				
5	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
5	A	D	Station	3	X		Station				
5	A	D	Incident Number	7	N	K		Numeric			Record key must be unique.
5	A	D	Exposure	3	N	K	0	Numeric, sequential			
5	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
			Injured Person								
5	B	D	Identification Number	9	X		Blank				
5	B	D	Gender	1	C	Y	Blank	1, 2			
5	B	D	Career/Volunteer	2	C		Blank	1, 2, Blank			National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 16 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
5	B	D	First Name	15	X		Blank				
5	B	D	Middle Initial	1	X		Blank				
5	B	D	Last Name	25	X		Blank				
5	B	D	Name Suffix	4	X		Blank				
5	C	D	Casualty Number	3	N	K	1 Incremented	Sequence Number	93		Increment by one for each casualty.
5	D	D	Age	3	N	Y	Null	Numeric	94	DOB	
5	D	S	Date of Birth	8	N		Blank	Valid date	94	Age	
5	E	D	Date of Injury	8	N	Y	Blank	YYYYMMDD	95		Standard date edit.
5	E	D	Time of Injury	6	N	Y	0	0000-235959	95		Standard time range, if seconds are not provided, then seconds are set to "00".
5	F	D	Number of Responses during past 24 hours	2	N		Null	Numeric			
5	G1	D	Usual Assignment	2	C		Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G2	D	Physical Condition Just Prior to Injury	2	C		Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G3	D	Severity	2	C		Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G4	D	Taken to	2	C		Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G5	D	Activity at Time of Injury	3	C		Blank	Valid codes			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	H1	D	Primary Apparent Symptom	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	H2	D	Primary Injured Body Part	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	I1	D	Cause of Firefighter Injury	3	C		Blank	Valid code	96		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	I2	D	Contributing Factor	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	I3	D	Object Involved in Injury - None	1	Y		No	Y or N	96		
5	I3	D	Object Involved in Injury	3	C		Blank	Involved in Injury None = Blank; Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	J1	D	Where Injury Occurred	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 17 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
5	J2	D	Below Grade flag	1	Y	D	No	Y or N		J2	
5	J2	D	Stories or Floor where injury occurred	3	N		Blank		97		
5	J3	D	Specific Location	3	C		Blank	Valid code	98	Vehicle Type J4	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	J4	D	Vehicle Type	2	C		Blank	Valid code	98, 99	J3 > 60	National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	K	D	Did Protective Equip fail and/or cont. to injury?	1	C	D	Blank	Y or N	100	Section K	If K is true then an equip record is required.
			Equipment Involved in Injury								
5	K1	D	Equipment Involved in Injury Sequence Number	3	N		1 Incremented	Numeric	100		Unique number(s) for each casualty, incremented for each piece of failed equipment.
5	K2	D	Equipment Item	3	C		Blank	Valid codes	100	K flag	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	K3	D	Equipment Problem	3	C		Blank	Valid code	100	K flag	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	K4	D	Equipment Manufacturer	12	X		Blank		100	K flag	
5	K4	D	Equipment Model	12	X		Blank		100	K flag	
5	K4	D	Equipment Serial Number	12	X		Blank		100	K flag	
6 EMS Module								If EMS Involvement indicated in Module 1	117	Basic Incident Module	Optional Module
6	A	D	State	2	C	K	State ID	Valid code			
6	A	D	FDID	5	X	K	Dept. ID				
6	A	D	Incident Date	8	D	K	YYYYMMDD/Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
6	A	D	Station	3	X		Station				
6	A	D	Incident Number	7	N	K		Numeric	117		Record key must be unique.
6	A	D	Exposure	3	N	K	0	N, sequential			
6	A	D	Delete/Change	1	X		Blank	Blank, 1,2			Blank = add: see note for code 3.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 18 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
6			Casualty Information								
6	B	D	Number of Patients	3	N		Null	Numeric			Must be > zero (0).
6	B	D	Patient Number	3	N	K	1 Incremented	Numeric	117		Must be > zero (0), Incremented by one for each patient for the incident.
6			Dates & Times								
6	C	D	Arrived at Patient Date	8	N		YYYYMMDD/ Blank	Valid date	118, 119		
6	C	D	Arrived at Patient Time	6	N		HHMMSS	000000-235959	118, 120		Midnight is 0000
6	C	D	Patient Transfer Date	8	N		YYYYMMDD/ Blank	Valid date	120		
6	C	D	Patient Transfer Time	6	N		HHMMSS	000000-235959	120		Midnight is 0000
6	D	D	Provider Impression/ Assessment	3	C	Y	Blank	Valid code	121, 131, 129, 130		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6			Age/Date of Birth								
6	E1	D	Age	6	N		Null	Numeric		DOB	Age will be NNN.NN
6	E1	S	Months for Infants	1	Y		No	Y or N			
6	E1	S	Date of Birth	8	N		Blank	Valid date		Age	Not required if Age field entered.
6	E2	D	Gender	1	C		Blank	Valid code: 1,2, blank			
6	F1	D	Race	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	F2	D	Ethnicity	2	C		Blank				National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	G1	D	Human Factors								See field notes
6	G1	D	Human Factors None	1	Y		Blank	N	57		
6	G1	D	Asleep	2	C		Blank	Code = 1	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Unconscious	2	C		Blank	Code = 2	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Possibly Impaired by Alcohol	2	C		Blank	Code = 3	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Possibly Impaired by Drugs	2	C		Blank	Code = 4	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Mentally Disabled	2	C		Blank	Code = 5	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 19 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
6	G1	D	Physically Disabled	2	C		Blank	Code = 6	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Physically Restrained	2	C		Blank	Code = 7	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Unattended person	2	C		Blank	Code = 8	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G2	D	Other Factors	2	C		Blank	Valid code			
6	H1		Body Site of Injury								
6	H1	D	Body Site # 1	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 2	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 3	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 4	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 5	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H2		Injury Type								
6	H2	D	Injury Type # 1	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 2	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 3	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 4	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 5	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H3		Cause of Illness/Injury								
6	H3	D	Cause of Illness/Injury # 1	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	K	D	Cardiac Arrest	1	C		Blank	Provider Imp. =16	122, 124, 125, 126	Provider Imp.	
6	K	D	Pre-Arrival Arrest Details	1	C		Blank	Provider Imp. =16	122, 124, 125, 126		

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 20 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
6	K	D	Initial Arrest Rhythm	1	C		Blank	Valid code	122, 125, 126		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	J	D	Safety Equipment	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	I	D	Procedures Used	3	C		Blank	Valid code			Enter as many as apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
6	L1	D	Initial Level of Provider	2	C	Y	Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	L2	D	Highest Level of Provider at Scene	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	M	D	Patient Status	2	C		Blank	Valid code	129		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	M	D	Pulse on Transfer	2	C		Y	1, 2	130		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	N	D	Disposition	2	C		Blank	Valid code	131		National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	HazMat Module							Hazardous Materials Released = 9	Basic Incident Module	Optional Form	
7	A	D	State	2	C	K	State ID	Valid code			
7	A	D	FDID	5	X	K	Dept. ID				
7	A	D	Incident Date	8	D	K	YYYYMMDD/Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
7	A	D	Station	3	X		Station				
7	A	D	Incident Number	7	N	K		N			Record key must be unique.
7	A	D	Exposure	3	N	K	0	N, sequential			
7	A	D	Hazmat Number	2	N	K	1	N, sequential			Increment by one.
7	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add.
7	B		Hazmat ID								
7	B	D	UN Number	4	X		Blank				
7	B	D	DOT Hazard Classification	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	B	D	CAS Registration Number	10	C		Blank	Valid code			
7	B	D	Name of Chemical or Material (Code)	7	C	Y	Blank	Select from table			If table does not contain the chemical or paper form entry, direct enter the chemical name (maximum of 50 characters)

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 21 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
7	B	D	Chemical Name	50	X	Y	Blank				Only directly enter by users if table does not contain the chemical or if a paper form entry is used.
7	C1	D	Container Type	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	C2	D	Estimated Container Capacity	9	N		0				
7	C3	D	Capacity Units	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	D1	D	Estimated Amount Release	9	N	Y	0		101		
7	D2	D	Released Units	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	E1	D	Physical State When Released	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	E2	D	Released Into	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
7	F1		Released From								
7	F1	D	Story of Release	3	N			If Release = inside			
7	F2	D	Population Density	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	G1	D	Area Affected	4	N		Blank	N			If zero is marked then "Area Affected Units" is set to Sq. feet (1).
7	G1	D	Area Affected Unit	2	C		Blank	Valid code, Area Affected is not Blank		Area Affected or Evacuated	National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	G2	D	Area Evacuated	4	N		Blank	N	102		If None is marked then Area Evacuated is set to zero (0) and Area Evacuated Units is set to Sq. Feet (1). Number of people evacuated and number of buildings evacuated should be set to zero as well.
7	G2	S	Area Evacuated - None	1	Y		Blank	Y or N			
7	G2	D	Area Evacuated Unit	2	C		Blank	Valid code, Area Affected is not blank		Area Affected or Evacuated	National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	G3	D	Estimated Number of People Evacuation	6	N		Blank	N	102		
7	G3	D	Estimated Number - None	1	Y		Blank	Y or N		If true need #	
7	G4	D	Estimated Number of Building Evacuated	4	N		Blank		102		

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 22 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
7	G4	S	Estimated Number of bldg. - None	1	Y		Blank	Y or N		If true need #	
7	H	D	HazMat Actions Taken # 1	3	C		Blank	Valid code	105	Actions Taken	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	H	D	HazMat Actions Taken # 2	3	C		Blank	Valid code	103, 105	Actions Taken	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	H	D	HazMat. Actions Taken # 3	3	C		Blank	Valid code	104	Actions Taken	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	I	D	If fire or explosion is involved with incident, Which Occurred First?	2	C		Blank	Valid code	106		National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	J	D	Cause of Release	2	C	Y	Blank	Valid code	107		National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	K		Factors Contributing to Release								
7	K	D	Factors #1	3	C		Blank	Valid code	110		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	K	D	Factors #2	3	C		Blank	Valid code	108, 110		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	K	D	Factors #3	3	C		Blank	Valid code	109, 110		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
	L		Factors Affecting Mitigation								
7	L	D	Mitigating Factors #1	3	C		Blank	Valid code	113		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	L	D	Mitigating Factors #2	3	C		Blank	Valid code	111, 113		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	L	D	Mitigating Factors #3	3	C		Blank	Valid code	112, 113		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	M		Equipment Involved in Release								
7	M	S	No Equipment Involved in Release flag	1	Y		Blank	Y or N	114	Equip Involved	T = none, Equipment Involved In Release code set to "NNN"
7	M	D	Equipment Involved	4	C		Blank	Valid code	114	Equip flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
7	M	D	Brand	25	X		Blank		114	Equip flag	
7	M	D	Model	25	X		Blank		114	Equip flag	

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 23 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
7	M	D	Serial #	25	X		Blank		114	Equip flag	
7	M	D	Year	4	N		Null	Numeric	114	Equip flag	
7	N	S	Mobile Property None flag	1	Y		Blank	Y or N	115	N section	T = none, Mobile Property Type set to "NN"
7	N	D	Mobile Property Involved	2	C		Blank	Valid code	115	N flag	National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	N	D	Make	2	C		Blank	Valid code	115	N flag	
7	N	D	Year	4	N		Null	Numeric	115	N flag	
7	N	D	Model	25	X		Blank		115	N flag	
7	N	D	License plate #	10	X		Blank		115	N flag	
7	N	D	State	2	C		Blank	Table	115	N flag	
7	N	D	DOT Number / ICC Number/VIN #	17	X		Blank		115	N flag	
7	O	D	Disposition	2	C	Y	Blank	Valid code	116		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
7	P	D	HazMat Deaths	4	N		Null	Numeric			
7	P	D	HazMat Injuries	4	N		Null	Numeric			
8	Wildland Module							Wildland Involvement indicated on Module 1	Basic Incident Module	Optional Form used in place of Fire Module.	
8	A	D	State	2	C	K	State ID	Valid code			
8	A	D	FDID	5	X	K	Dept. ID				
8	A	D	Incident Date	8	D	K	YYYYMMDD/Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
8	A	D	Station	3	X		Station				
8	A	D	Incident Number	7	N	K		N			Record key must be unique.
8	A	D	Exposure	3	N	K	0	N, sequential			
8	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
8	B		Alternate Location Specification								
8	B	D	Latitude	5	N		Null	Valid Latitude	132, 133	Latitude & Longitude	
8	B	D	Longitude	6	N		Null	Valid Longitude	132, 133	Latitude & Longitude	

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 24 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
8	B	D	Township	2	X		Blank		132, 133		
8	B	D	Township Direction	1	C		Blank	N or S	132, 133		
8	B	D	Range	3	X		Blank		132, 133		
8	B	D	Range Direction	1	C		Blank	E or W	132, 133		
8	B	D	Section	2	N		Blank		132, 133		
8	B	D	Subsection	4	X		Blank		132, 133		
8	B	D	Meridian	2	C		Blank	Valid code	132, 133		
8	C	D	Area Type	2	C	Y	Blank	Valid code			Codes 1,2,3,4. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D1	D	Wildland Fire Cause	1	C	Y	Blank	Valid code			
8	D2		Human Factors								
8	D2	D	Human Factors Contributing None	1	C	D	Blank	Code = N	57, 58	Human Factors Contributing	
8	D2	D	Human Factor - Asleep	2	C	D	Blank	Code = 1	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Impaired by Alcohol	2	C	D	Blank	Code = 2	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Unattended person	2	C	D	Blank	Code = 3	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Mentally disabled	2	C	D	Blank	Code = 4	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Physically disabled	2	C	D	Blank	Code = 5	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Multiple persons.	2	C	D	Blank	Code = 6	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Age was a factor	2	C	D	Blank	Code = 7	59	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
			Factor Contributing to Ignition								
8	D3	D	Factor Contributing to Ignition (1)	3	C		Blank	Valid code	54, 55		If Exposure > 0 then Code = 71. National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	D3	D	Factor Contributing to Ignition (2)	3	C		Blank	Valid code	54, 55		If Exposure > 0 then Code = 71. National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	D4	D	Fire Suppression Factor # 1	4	C		Blank	Valid code	61		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 25 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
8	D4	D	Fire Suppression Factor # 2	4	C		Blank	Valid code	62		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
8	D4	D	Fire Suppression Factor # 3	4	C		Blank	Valid code	62		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
8	E	D	Heat Source	3	C		Blank	Valid code	47		National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	F	D	Mobile Property Type	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
8	G	D	Equipment Involved	4	C		Blank	Valid code			National Codes plus one digit (NNNL): display National field lengths unless local option character is defined.
8	H	D	Weather Station ID	6	X		Blank				
8	H	D	Weather Type	3	C		Blank	Valid code			National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
8	H	D	Wind Direction	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	H	D	Wind Speed	3	N		Null	Numeric			
8	H	D	Temperature	4	N		Null	Numeric			Allowing for negative values.
8	H	S	Negative Temp. flag	1	X		Blank				
8	H	D	Humidity	3	N		Null	0-100%		< = 100%	
8	H	D	Fuel Moisture	2	N		Null				
8	H	D	Fire Danger Rating	2	C		Blank	Valid code			Codes 1-5 & U. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	I1	S	Number of Bldg. Ignited flag	1	N		Blank				
8	I1	D	Number of Bldg. Ignited	3	N		Null	Numeric			
8	I2	S	Number of Bldg. Threatened flag	1	N		Blank				
8	I2	D	Number of Bldg. Threatened	3	N		Null	Numeric			
8	I3	D	Total Acres Burned	11	N	Y	Null	Numeric	134		
8	I4	D	Primary Crops Burned - Crop 1	25	X		Blank		135		
8	I4	D	Primary Crops Burned - Crop 2	25	X		Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 26 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
8	I4	D	Primary Crops Burned - Crop 3	25	X		Blank				
8			Property Management								
8	J	D	Property Mgmt. - Code	2	C		Blank				National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	J	D	% of Total Acres Burned - Undetermined	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Tax paying	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Non tax paying	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - City town, village, local	3	N		Null	Numeric	136		
8	J	D	% Total Acres Burned - County or Parish	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - State or province	3	N		Null	Numeric	136		
8	J	D	Federal Agency Code	5	X		Blank	Numeric	136, 137		
8	J	D	% of Total Acres Burned - Federal	3	N		Null	Numeric	136, 137		
8	J	D	% of Total Acres Burned - Foreign	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Military	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Other	3	N		Null	Numeric	136		
8	K	D	NFDRS Fuel Model At Origin	3	C		Blank	Valid code; 01-21 & UU			National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
8	L1	D	Person Responsible for Fire	2	C		Blank	Valid code	138	Blocks L2, L3 & L4	National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	L2	D	Person Involved Gender	1	C		Blank	Valid code, Person Resp. for Fire = 1	139	Person Resp. for Fire	
8	L3	D	Age	6	N		NNN.NN	Person Resp. for Fire = 1		Person Resp. for Fire	

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 27 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
8	L3	S	Date of Birth	8	N		Blank	Valid date, Person Resp. for Fire = 1		Person Resp. for Fire	
8	L4	D	Activity of Person	3	C		Blank	Valid code, Person Resp. for Fire = 1		Person Resp. for Fire	National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
8	M	D	Horizontal Distance from Right of Way	2	N		Null	less than 100 ft.	140		
8	M	D	Type of Right of Way	4			Blank	Valid code	140		National Codes plus one digit (NNNL): display National field lengths unless local option character is defined.
8			Fire Behavior								
8	N	D	Elevation in Feet	5	N		Null	Numeric			
8	N	D	Relative Slope Position	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	N	D	Aspect	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	N	D	Flame Length	2	N		Null	Numeric			
8	N	D	Rate of spread (Chains per hour)	3	N		Null	Numeric			
9	Apparatus Module									Optional Form; Personnel Module not used.	
9	A	D	State	2	C	K	State ID	Valid code			
9	A	D	FDID	5	X	K	Dept. ID				
9	A	D	Incident Date	8	D	K	YYYYMMDD/Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
9	A	D	Station	3	X		Station				
9	A	D	Incident Number	7	N	K		Numeric			
9	A	D	Exposure	3	N	K	0	N, sequential			
9	B	D	Apparatus or Resource Record Number	4	N	K	0	N, sequential			System generated.
9	B	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
9	B	D	ID of Apparatus or Resource	5	X	Y	Blank				
9	B	D	Type of Apparatus or Resource	2	C	Y	Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	S	Dispatch flag	1	Y		Blank	Y or N			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 28 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
9	B	D	Dispatch Date	8	N		Blank	Valid date	141		
9	B	D	Dispatch Time	4	N		Blank	000000-235959	141		Valid time, if seconds are not collected then they must be zero (00).
9	B	S	Clear flag	1	Y		Blank	Y or N			
9	B	D	Clear Date	8	N		Blank	Valid date	143		
9	B	D	Clear Time	4	N		Blank	000000-235959	143		Valid time, if seconds are not collected then they must be zero (00).
9	B	S	Arrive flag	1	Y		Blank	Y or N			
9	B	D	Arrive Date	8	N		Blank	Valid date	142		
9	B	D	Arrive Time	4	N		Blank	000000-235959	142		Valid time, if seconds are not collected then they must be zero (00).
9	B	I	Sent								
9	B	D	Number of People	3	N	Y	Null	N, < 999		I	
9	B	D	Use	2	X	Y	Blank	Table			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
9	B	D	Action#1	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	D	Action#2	3	C		Blank				National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	D	Action#3	3	C		Blank				National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	D	Action#4	3	C		Blank				National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	Personnel Module								Optional Form; Apparatus Module not used.		
10	A	D	State	2	C	K	State ID	Valid code			
10	A	D	FDID	5	X	K	Dept. ID				
10	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
10	A	D	Station	3	X		Station				
10	A	D	Incident Number	7	N	K		Numeric			
10	A	D	Exposure	3	N	K	0	N, sequential			
10	B	D	Personnel Record Number	4	N	K		N, sequential			System generated.
10	B	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
10	B	D	ID of Apparatus or Resource	5	X	Y	Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 29 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
10	B	D	Type of Apparatus or Resource	3	C	Y	Blank	Valid code			
10	B	S	Dispatch flag	1	Y		Blank	Y or N			
10	B	D	Dispatch Date	8	N		Blank	Valid date	144		
10	B	D	Dispatch Time	4	N		Blank	000000-235959	144		Valid time, if seconds are not collected then they must be zero (00).
10	B	S	Arrival flag	1	Y		Blank	Y or N			
10	B	D	Arrival Date	8	N		Blank	Valid date	145		
10	B	D	Arrival Time	4	N		Blank	000000-235959	145		Valid time, if seconds are not collected then they must be zero (00).
10	B	S	Clear flag	1	Y		Blank	Y or N			
10	B	D	Clear Date	8	N		Blank	Valid date	146		
10	B	D	Clear Time	4	N		Blank	000000-235959	146		Valid time, if seconds are not collected then they must be zero (00).
10	B	I	Sent								
10	B	D	Number of People	3	N	Y	Null	N, < 999			Number of People will be rolled up to the basic form.
10	B	D	Use	1	C	Y	Blank	Table			
10	B		Apparatus or Resource Actions Taken								
10	B	D	Action #1	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #2	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #3	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #4	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Personnel ID	9	X	Y	Blank				
10	B	D	Name	41	X		Blank				First, Middle, Last Name fields totaling 41 characters in size.
10	B	D	Rank or Grade	6	X		Blank				
10	B	I	Attend								
10	B		Personnel Actions Taken								
10	B	D	Action #1	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 30 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
10	B	D	Action #2	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #3	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #4	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
11 Arson Module 147											
11	A	D	State	2	C	K	State ID	Valid code			
11	A	D	FDID	5	X	K	Dept. ID				
11	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
11	A	D	Station	3	X		Station				
11	A	D	Incident Number	7	N	K		Numeric			
11	A	D	Exposure	3	N	K	000	N, sequential			
11	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
11	B		Agency Referred to								
11	B	D	Agency Name	30	X		Agency Name				
11	B	D	Agency Street Number	8	N		Blank				
11	B	D	Agency Street Prefix	2	C		Blank	Valid code			Use Table
11	B	D	Agency Street or Highway Name	30	X	Y	Blank	Alpha/numeric			
11	B	D	Agency Street Type	4	C		Blank	Valid code			Use Table
11	B	D	Agency Street Suffix	2	X		Blank	Valid Code			
11	B	D	Agency Apt or Suite	15	X		Blank	Alpha/numeric			
11	B	D	Agency City	20	A		Blank	Alphabetic			
11	B	D	Agency State	2	C		Blank	Valid state abbrev.			
11	B	D	Agency Zip Code	9	N		Blank				
11	B	D	Their case #	12	X		Blank				
11	B	D	Their ORI	5	X		Blank				
11	B	D	Their FID	2	X		Blank				
11	B	D	Their FDID	5	X		Blank				
11	C	D	Case Status	2	C			Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 31 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
11	D	D	Availability of Material First Ignited	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	E	D	Suspected Motivation Factors	3	C		Blank	Valid code	148		Select up to 3 factor codes. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	F	D	Apparent Group Involvement	2	C		Blank	Valid code	149		Select up to 3 factor codes. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	G1	D	Entry Method	3	C		Blank	Valid code			National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	G2	D	Extent of Fire Involvement on Arrival	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	H	D	Incendiary Devices								
11	H	D	Container	3	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	H	D	Ignition/Delay Device	3	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	H	D	Fuel	3	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	I	D	Other Investigative Information	2	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	J	D	Property Ownership	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	K	D	Initial Observations	2	C		Blank	Valid code	150		Select all that apply. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	L	D	Laboratory Used	2	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M1	S	Subject Number	3	N			Numeric; sequential			
11	M2	D	Age	6	N		000.00	Numeric	151		
11	M2	D	Date of Birth	8	N		Blank	Valid date			
11	M3	D	Gender	2	C		Blank	1, 2, Blank			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M4	D	Race	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M5	D	Ethnicity	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M6	D	Family Type	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3-1. NFIRS 5.0 Edit Requirements (Sheet 32 of 32)

Module No.	Line	Element Type	Element	Size	Field Type	REQ	Default	Acceptable Conditions	Relational Edit	Cross Fields	Notes
11	M7	D	Motivation, Risk Factors	2	C		Blank	Valid code	152, 153		Select all that apply, codes 1 through 3 are mutually exclusive. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M8	D	Disposition	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
X Supplemental Module											
			Same as K1 on Module #2								
X Fire Department Identification Record											
		D	FDID	5	X	K	Blank	Alphanumeric			
		D	State Code	2	C	Y	Blank	Valid code			
		D	FIPS County code	3	X	Y	Blank	Numeric			
		D	Department Name	30	X	Y	Blank				
		D	Number of Stations	3	N	D	0				
		D	Address	25	X	Y	Blank				
		D	City	20	X	Y	Blank				
		D	State	2	C	Y	Blank	Valid code			
		D	Zip	9	N	Y	Null	Numeric			
		D	Number of Paid	4	N	Y	Null	Numeric			
		D	Number of Volunteer, Paid per Call	4	N	Y	Null	Numeric			
		D	Number of Volunteer, not paid	4	N	Y	Null	Numeric			
		D	Telephone Number	10	N		Blank				
		D	Fax Number	10	N		Blank				
		D	E-Mail Address	45	X		Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

Relational Edits

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 1 of 9)

Edit	Form	Block	Field	Relational Edit
1	Basic	A	Record Key	This must be unique. The key is the following elements: State, FDID, Alarm Date, Incident Number, Exposure Number.
2	Basic	A	Exposure Number	This number must be ascending, incrementally 1, beginning with 000 (NOTE: A main fire incident with an exposure of 000 MUST exist in the system before exposures (> 000) are allowed). If Incident Type is not in the 100 series (fires), Exposure Number cannot be greater than zero.
3	Basic	A	Transaction Type	If Transaction Type = blank (add) then no duplicate record should be found. If Transaction Type = 1 (change), then existing record must be retrieved and displayed for modification.
4	Basic	A		If Transaction Type = 2 (delete) then duplicate should be found and only the data elements in the key should be provided. If Transaction Type = 3 (no monthly activity), then Alarm Date (YYYYMM), incident number (0), exposure number (0) are all that is required.
5	Basic	B	Location	If Alternate Wildland Location box is not selected, Location on Basic form is required.
6	Basic	B	Location	If intersection is checked, then Street/Highway Name and Cross Street Name must be complete.
7	Basic	C	Incident Type	If Incident Type not = 100 series, then the Fire Form and the Structure Fire Form are not allowed.
8	Basic	C	Incident Type	If Incident Type not = 100 series and Incident Type not = 561, 631, 632, then F Block (Actions Taken) fields 1, 2, or 3 cannot be an 11 or 13, 14, 15, 16, or 17.
9	Basic	C	Incident Type	If Incident Type = 111-112, then Structure Fire form is required.
10	Basic	C	Incident Type	If Incident Type = 100, 113-118 then completion of the fire form is optional, not required and Block H2, Detector Alerted Occupants, is required.
11	Basic	C	Incident Type	If Incident Type = 120 series, then the Structure Fire form is required.
12	Basic	C	Incident Type	If Incident Type = 150 series, then the Fire Form is optional, not required.
13	Basic	C	Incident Type	If used, the EMS module is only allowed for Incident Types: 100-243, 311, 321-323, 351-381, 400-431, 451, 900.
14	Basic	C	Incident Type	Incident Type 54x valid Actions Taken all of 20's & > 50's or Actions Taken = 00.
15	Basic	C	Incident Type	Incident Type 71x valid Actions Taken >= 50 and < 90 or Actions Taken = 00.
16	Basic	C	Incident Type	Incident Type 72x valid Actions Taken < 1X, < 40's.
17	Basic	C	Incident Type	Incident Type 73x valid Actions Taken < 1x, < 40's, < 90.
18	Basic	C	Incident Type	Incident Type 74x valid Actions Taken < 1x, < 40's, < 90.
19	Basic	C	Incident Type	Incident Type 80x valid Actions Taken All.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 2 of 9)

Edit	Form	Block	Field	Relational Edit
20	Basic	C	Incident Type	Incident Type 9xx valid Actions Taken ≥ 50 & < 90 or Actions Taken = 00.
21	Basic	D	Aid Given or Received	If aid is given (codes 3, 4 or 5), then only the information on the Basic module through block G1 (Resources) must be completed by the department giving aid. The remainder of the Basic module and any other modules associated with the incident may be optionally completed but is not required. The information not captured by the department giving aid is captured by the department that receives aid for that incident.
22	Basic	E1	Alarm Time	Alarm Date/Time cannot be later than Arrival Date/Time.
23	Basic	E1	Alarm Time	Alarm Date/Time cannot be later than Date/Time Controlled.
24	Basic	E1	Alarm Time	Alarm Date/Time cannot be later than Last Unit Cleared Date/Time.
25	Basic	E1	Arrival Time	Arrival Date/Time cannot be later than Date/Time Controlled.
26	Basic	E1	Arrival Time	Arrival Date/Time cannot be later than Last Unit Cleared Date/Time.
27	Basic	E1	Control Time	Control Date/Time cannot be later than Last Unit Cleared Date/Time.
28	Basic	E1	Last Unit Cleared	Last Unit Cleared Date/Time cannot be less than Alarm Date/Time.
29	Basic	E1	Last Unit Cleared	Last Unit Cleared Date/Time must be entered if the Wildland module is not completed.
30	Basic	F	Action Taken	Cannot be duplicate, except for blanks.
31	Basic	F	Action Taken	Action Taken 1 must be entered before Action Taken 2.
32	Basic	F	Action Taken	Action Taken 2 must be entered before Action Taken 3.
33	Basic	G2	Dollar Loss	If Pre-Incident Property value entered, then it must be \geq Property Losses.
34	Basic	G3	Dollar Loss	If Pre-Incident Contents value entered, then it must be \geq Contents Losses.
35	Basic	H1	Civilian Fire Casualty	If Incident Type > 100 series, then Civilian Casualty Form is not available.
36	Basic	J	Property Use	If Property Use = 400 series and Incident Type = 100 series, except 113 thru 118, then Property Details, Block B1 on the Fire form (# living units) must be entered.
37	Basic	J	Property Use	If Property Use = 500 - 800 series and Incident Type = 100 series, except 113 thru 118, then On Site Materials, Block C on the Fire form must be entered (none is valid entry) else the field is optional.
38	Fire		Fire Module	If the Incident Type is 140-143 or 160,170-173, then either the Fire module or the Wildland module is required. One of the two must be completed. If the Incident Type is 561,631 or 632, the Fire Module is not allowed but the Wildland Module may be optionally completed in addition to the Basic Module for these incidents.
39	Fire		Fire Module	This module must be present if the Incident Type is 100 series, except for Incident Types 100, 113-118 and Incident types 150-155. When the Incident type is 140-143, 160, 170-173, 561, 631-632 then the Wildland Module may be used instead of the Fire Module.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 3 of 9)

Edit	Form	Block	Field	Relational Edit
40	Fire	B1	Property Details	If Residential flag not blank, then residential units must be zero (0) and the converse is also true.
41	Fire	B2	Property Details	If Bldg. flag > blank, then Bldg. Involved must be zero (0) and the converse is also true.
42	Fire	B2	Property Details	If Exposure Number > zeroes then this field cannot be greater than Zero (totals for the incident are carried in the zero exposure)
43	Fire	B3	Property Details	If acres Burned None/Less than one acre is > blank, then Acres Burned must be Blank.
44	Fire	B3	Acres Burned	If Incident Type = 140, 170 series then required unless Open/Wild-land form is used.
45	Fire	C	On-Site Material	If None is checked, then no On-Site Materials are allowed.
46	Fire	C	On-Site Material	For each On-Site Material entered, one (and only one) of the Storage Uses for that material must be selected.
47	Fire	D2	Heat Source	This data element can not be in the 80 series unless Exposure Number greater than zero (0).
48	Fire	D3	Item First Ignited	This data element series 10 should be used only for Structure Fires.
49	Fire	D3	Flame Spread	If Confined to Object of Origin is checked, then J2 and K Blocks on the Structure Report are not available.
50	Fire	D4	Type of Material 1st Ignited	Required only if Item First Ignited 0 or < 70.
51	Fire	E1	Cause of Ignition	If Exposure Number > zero (0) this element should be set to Other.
52	Fire	E1	Cause of Ignition	If Cause of Ignition = 2 (Unintentional) then Block E2 and Block E3 (Factors Contributing and Human Factors) are required (none is valid answer).
53	Fire	E1	Cause of Ignition	If Cause of Ignition = 3 or 4 (Failure of Equipment or Heat Source, Act of Nature), then Block E2 (Factors Contributing) is required (none is valid answer).
54	Fire	E2	Factors Contributing	If None is checked then no data may be entered. If "NN" or "UU" are entered as the first factor contributing to igniton, a second factor cannot be entered.
55	Fire	E2	Factors Contributing	If Exposure Number > zero (0) then Factor Contributing #1 will be set to 71, Factor #2 will be blank.
56	Fire	E2	Factors Contributing	Factor Contributing #1 cannot be = to Factor #2.
57	Fire	E3	Human Factors	If None is checked no data may be entered.
58	Fire	E3	Human Factors	If Exposure Number > zero (0) this element is not available.
59	Fire	E3	Human Factors	If Age Was Factor is checked, then age must be greater than zero (0), and gender must be present.
60	Fire	F1	Equipment Involved	If F1 (Equipment Involved) is not = none then F2 Block (Equipment Power Source) and F3 Block (Equipment Portability) are required.
61	Fire	G1	Fire Suppression	If None is checked no data entry is allowed.
62	Fire	G1	Fire Suppression	Each of the Fire Suppression Factors must not duplicate other Fire Suppression factors entered.
63	Basic	C	Incident Type	If Incident Type = 130 (vehicle fire) series, then H1 (Mobile Property Involved) on the fire form cannot be "none".

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 4 of 9)

Edit	Form	Block	Field	Relational Edit
64	Fire	H1	Mobile Prop Involved	If None is checked no data entry is allowed.
65	Fire	H1	Mobile Prop Involved	If Code = 2 or 3 then H2 (Mobile Property Type and Make) entry is required.
66	Structure Fire	I1	Structure Type	If Structure Type not = 1 or 2, then the rest of the module is not required.
67	Structure Fire	I2	Structure Type	If Structure Type = 1 or 2 then I2, I3, I4, J1, J2, L1 and M1 Blocks are required, otherwise it is optional.
68	Structure Fire	I4	Structure Type	If Total Square Feet is present then Length/Width must be Blank, and the converse is also True.
69	Structure Fire	J2	Object of Origin	If J2 = 1, 2 or 3 then J3 Total cannot exceed 1.
70	Structure Fire	J2	Fire Spread	This edit has been removed.
71	Structure Fire	J3	Number of Stories Damaged	J3 Total cannot exceed the Total of I3 + 1.
72	Structure Fire	K	Material Contributing	If No Flame Spread or Same Material is checked then K1 and K2 are not available.
73	Structure Fire	K2	Type of Material Contributing to Flame Spread.	Required only if Item Contributing Code is 00 or < 70.
74	Structure Fire	L1	Presence of Detector	If Presence of Detectors is YES, then L2, L3 and L4 are required. If Presence of Detectors is left blank, then L2, L3 and L4 are not available.
75	Structure Fire	L4	Detector Operation	If Detector Operation = 2 Then L5 is required. If Detector Operation not = 2 Then L5 Detector Effectiveness entry is not allowed.
76	Structure Fire	L4	Detector Operation	If Detector Operation = 3 Then L6 is required. If Detector Operation = 2 Then L6 Detector Failure Reason is not allowed.
77	Structure Fire	L6	Detector Operation	If Detector Failure Reason = 1, then Detector Power Supply can not be equal to 1 or 6.
78	Structure Fire	L6	Detector Operation	If Detector Failure Reason = 5 or 6, then Detector Power Supply can not be equal to 2, 3, or 6.
79	Structure Fire	M1	Pres. of Automatic Extinguishment Systems.	If not present then, M2, M3, M4 and M5 are not available.
80	Structure Fire	M4	Number of Heads	If M3 = 1 or 2, then this data element is available and must be greater than zero (0).
81	Structure Fire	M5	AES Failure	If M3 = 1, then M5 is not available.
82	Civilian	D	Age or DOB	If DOB is present, then Age is calculated. If Age is present, then DOB is not available.
83	Civilian	G	Date of Injury	Cannot be later than the Date/Time of Last Unit Cleared on the Basic Form.
84	Civilian	J	Human Factors Cont.	If None is checked, then other codes are not available.
85	Civilian	K	Factors Contributing	If NONE is checked, then other codes are not available. If "NN" or "UU" are entered as the first factor contributing, a second factor cannot be entered.
86	Civilian	K	Factors Contributing	These codes must be unique, except for blanks.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 5 of 9)

Edit	Form	Block	Field	Relational Edit
87	Civilian	M2	General Location	If General Location (M2) = 1 then Blocks M3, M4 and M5 are not required.
88	Civilian	M2	General Location	If General Location = 2 or 3, then Block M5 is required and entry of code 2 or 3 under block M1 is required.
89	Civilian	M3	Story at Start of Inc.	This is required only if M2 = 2.
90	Civilian	M3	Story at Start of Inc.	If the Structure Fire Module exists and the Building Height there is not equal to zero, then M3 cannot be greater than the Building Height on the Structure Fire Form.
91	Civilian	M4	Story at Start of Inc.	This is required only if M2 = 2.
92	Civilian	M4	Story Where Injury Occured	If the Structure Fire Module exists and the Building Height there is not equal to zero, then M4 cannot be greater than the Building Height on the Structure Fire Form.
93	FireFighter	C	Casualty Number	This data element cannot exceed the Total number of Injuries and Deaths from H1 on Basic Form.
94	FireFighter	D	Age or DOB	If DOB is present, then Age is calculated. If Age is present, then DOB is not available.
95	FireFighter	E	Date & Time of Injury	The Date & Time cannot precede the Alarm Date/Time nor exceed the Date/Time of Last Unit Cleared.
96	FireFighter	I1	Cause of Injury	If Cause of Injury = 5 or 6, then I3 (Object involved) is required entry.
97	FireFighter	J2	Story Where Injury Occured	If injured inside/On Structure then the Story of Injury must be entered.
98	FireFighter	J3	Specific Location	If Specific Location = 61, 63, 64 or 65, then J4 (Vehicle Type) is required.
99	FireFighter	J4	Vehicle Type	If Specific Location = 61, 63, 64 or 65, then J4 is required.
100	FireFighter	K1	Did Equipment Fail	If No, then K2, K3, K4 not required.
101	HazMat	D1	Est. Amount Release	If D2 = C3, then the Estimated Amount of Release cannot exceed the Estimated Container Capacity.
102	HazMat	G2	Area Evacuated	If Area Evacuated is None, then G3 and G4 must be zero (0).
103	HazMat	H	HazMat Action Taken	Action Taken 2 cannot be present without a Primary Action Taken.
104	HazMat	H	HazMat Action Taken	Action Taken 3 cannot be present without an Action Taken 2.
105	HazMat	H	HazMat Action Taken	Actions Taken 1, 2, 3 cannot be duplicates.
106	HazMat	I	Fire/Explosion?	If I Block = 1 or 2 (a fire or explosion was involved), then Incident type must be 100 or 200 series.
107	HazMat	J	Cause of Release	If Cause of release = 2, then K Block (Factors Contributing) is required.
108	HazMat	K	Factor Contributing	Factor Contributing #2 cannot present without a Factor Contributing #1. If "NN" or "UU" are entered as the first factor contributing, a second factor cannot be entered.
109	HazMat	K	Factor Contributing	Factor Contributing #3 cannot present without a Factor Contributing #2.
110	HazMat	K	Factor Contributing	Factor Contributing #'s 1, 2, 3 cannot be duplicates.
111	HazMat	L	Mitigating Factors	Mitigating Factors #2 cannot be present without a Mitigating Factor #1.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 6 of 9)

Edit	Form	Block	Field	Relational Edit
112	HazMat	L	Mitigating Factors	Mitigating Factors #3 cannot be present without a Mitigating Factor #2.
113	HazMat	L	Mitigating Factors	Mitigating Factors #'s 1, 2, 3 must be unique.
114	HazMat	M	Equipment Involved	If None is checked, then data entry is not available.
115	HazMat	N	Mobile Property	If None is checked, then data entry is not available.
116	HazMat	O	Disposition	Data Entry is required.
117	EMS	B	Record Key	This must be unique. The key is the following elements: State, FDID, Alarm Date, Incident Number, Exposure Number and Patient Number. Patient Number must begin with 001 and be unique. Patient Number cannot exceed the number of patients.
118	EMS	C	Time arrived at Patient	Arrived at Patient Date/Time must be equal or less than Patient Transfer Date/Time.
119	EMS	C	Time Arrived at Patient	Arrived at Patient Date/Time must be equal or greater than Alarm and Arrival Date/Time.
120			Time of Patient Transfer	Time of Patient Transfer must be equal or greater than Alarm Date/Time.
121	EMS	D	Provider Impression	If Impression Code = 16, then Block K is required
122	EMS	H ₁	Body Site & Inj Type	Each Body Site must have an Injury type. Body Site may be repeated up to five times. Injury Type may be repeated, however the Body Site & Injury Type combination may not be repeated.
123	EMS	I	Procedures Used	At least one procedure must be selected, but they are not mutually exclusive; except no treatment.
124	EMS	K	Pre-Arrival Arrest	If this is true, then Bystander CPR and Witnessed should be available. Pre-Arrival Arrest and Post-Arrival Arrest are mutually exclusive. Either Data Element requires an Initial Arrest Rhythm.
125	EMS	K	Post-Arrival Arrest	Pre-Arrival Arrest and Post-Arrival Arrest are mutually exclusive. This requires an Initial Arrest Rhythm.
126	EMS	K	Initial Arrest Rhythm	These data elements require either Pre-Arrival or Post-Arrival Arrest.
127	EMS	L₁	Initial Level of Provider	This edit has been removed.
128	EMS	L₂	Highest Level of Provider at Scene	This edit has been removed.
129	EMS	M	Patient Status	This is a required field and one must be selected. Unless None was selected in Provider Impression Block D.
130	EMS	M	Pulse on Transfer	This is a required field and one must be selected. Unless None or refused treatment was selected in Provider Impression Block D.
131	EMS	N	Disposition	This is required unless Provider Impression is None or refused treatment.
132	Wildland	B	Alt Location Spec	This data element is required if the Alternate Location Box on the Basic Form is checked.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 7 of 9)

Edit	Form	Block	Field	Relational Edit
133	Wildland	B	Alt Location Spec	If Section B on the Basic Form is not complete, then this Relational Edit is True. If Latitude/Longitude is completed, then the Township, Range, Section, Subsection and Meridian may be blank; if Latitude/Longitude is blank, then the Township, Range, Section, Subsection and Meridian must be completed.
134	Wildland	I3	Total Acres Burned	This value must be greater than 0.0.
135	Wildland	I4	Primary Crops Burned	Primary crop #1 must completed before crop #2 and crop #2 before crop #3.
136	Wildland	J	Property Management	If entered, Percentages of acres burned must total 100%.
137	Wildland	J	Property Management	If Federal Ownership the Federal Agency code must be entered
138	Wildland	L1	Person Responsible	If L1 = 1, then L2, L3, L4 must be entered.
139	Wildland	L2	Gender	This is valid only when L1- Person Responsible = 1.
140	Wildland	M	Right of Way	If distance from right of way is used, then type of right of way must be coded.
141	Apparatus		Dispatch Time	Dispatch Date/Time cannot be earlier than the Alarm Date/Time and cannot be later than the Arrival Date/Time, the Clear Date/Time or the Last Unit Cleared Date/Time.
142	Apparatus		Arrival Time	Arrival Date/Time cannot be earlier than the Alarm Date/Time, the Arrival Date/Time or later than the Clear Date/Time or Last Unit Clear Date/Time. Since there are separate arrival times captured for each piece of apparatus on the Apparatus/Personnel module, the Arrival Time of any unit/apparatus cannot be earlier than the Arrival Time entered on the Basic Module.
143	Apparatus		Clear Time	Clear Date/Time cannot be earlier than the Alarm Date/Time, the Dispatch Date/Time, the Arrival Date/Time or later than the Last Unit Cleared Date/Time.
144	Personnel		Dispatch Time	Dispatch Date/Time cannot be earlier than the Alarm Date/Time and cannot be later than the Arrival Date/Time, the Clear Date/Time or the Last Unit Cleared Date/Time.
145	Personnel		Arrival Time	Arrival Date/Time cannot be earlier than the Alarm Date/Time, the Arrival Date/Time or later than the Clear Date/Time or Last Unit Clear Date/Time.
146	Personnel		Clear Time	Clear Date/Time cannot be earlier than the Alarm Date/Time, the Dispatch Date/Time, the Arrival Date/Time or later than the Last Unit Cleared Date/Time.
147	Arson			This module is active only if the Cause of Ignition field in the Fire Module is equal to 1, 2, 5, or U or the Wildland Fire Cause = 7 (If the Wildland Module is used instead of the Fire Module). If the Fire Module's Cause of Ignition = 2 then only Block A and Block M fields are allowed and active.
148	Arson	E	Suspected Motivation Factors	If either code 0 or U is selected, no other codes may be selected.
149	Arson	F	Apparent Group Involvement	If either code 0 or U is selected, no other codes may be selected.
150	Arson	K	Initial Observations	If code 3 or 4 is chosen, only one of the two codes may be selected. They are mutually exclusive.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 8 of 9)

Edit	Form	Block	Field	Relational Edit
151	Arson	M2	Age	If subject Age is greater than 17, then Arson Module blocks M1 through M8 (except for M2) are not allowed.
152	Arson	M7	Motivation/Risk Factors	If either code 0 or U is selected, no other codes may be selected.
153	Arson	M7	Motivation/Risk Factors	If codes 1, 2, or 3 is chosen, only one of the three codes may be selected. They are mutually exclusive. Any of the other codes may be chosen if they apply.
154	All		Fire Service Casualties	A critical error is generated for ALL incident types if the number of Fire Service Casualty Forms filled out does not equal the number of Fire Service Injuries and Deaths reported on the Basic Module unless the EMS module is also present. If the EMS module is completed as well, and the count of EMS and Fire Service Casualties on the Basic Module exceeds the sum of EMS and Fire Service Casualty records, then only a warning is generated (since both modules may record the same casualty).
155	All		Civilian Casualties	If the number of Civilian Fire Casualty Forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module AND the incident is a fire incident AND no HazMat or EMS is involved THEN a warning error is generated.
156	All		Civilian Casualties	If the number of Civilian Fire Casualty Forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module plus the casualty totals reported on the HazMat form AND the incident is a fire incident AND the HazMat module is present AND the EMS module is not present THEN a warning error is generated.
157	All		Civilian Casualties	[If the number of Civilian Fire Casualty Forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module and the incident is a fire incident and the EMS module is present] (OR) [If the number of Civilian Fire Casualty Forms filled out plus the number of EMS forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module and the incident is a fire incident and the EMS module is present] (THEN) A warning is generated
158	All		Civilian Casualties	[If the number of Civilian Fire Casualty Forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module plus the totals reported on the HazMat form AND the incident is a fire incident AND the HazMat module is present AND the EMS module is present] OR [If the number of Civilian Fire Casualty Forms filled out plus the number of EMS forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module plus the totals reported on the HazMat form AND the incident is a fire incident AND the HazMat module is present AND the EMS module is present] THEN A warning is generated
159	Basic	G1	Resources	If Apparatus or Personnel Module used, populate the Block G1 Resources fields on the Basic Module with the totals from the Apparatus or Personnel Module fields
160	Basic	G2	Estimated Dollar Losses	If Incident Type = 1xx (fire) then generate a validation warning if either the Property or the Contents Dollar Loss loss value is greater than \$500,000

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 9 of 9)

Edit	Form	Block	Field	Relational Edit
161	Basic	B	Location	If the "Directions" location type is checked then the Street Name field is not required and the "Cross Street or Directions" field is required.
162	All		Dates/Times	For all NFIRS 5.0 date and time fields, if the date field is completed, the associated hours and minutes fields must also be entered and cannot be left blank.
163	Fire	H1	Mobile Property Involved	If Fire Module Block H1 "Mobile Property Involved" is not equal to 1, None or Blank AND Block F1 Equipment Involved in Ignition is not equal to Blank or None, a error is generated because there cannot be BOTH Mobile Property Involved and Equipment Involved in the ignition of the fire.
164	Basic, Apparatus, Personnel	F	Actions Taken	"00 Other Action Taken" is always a valid entry. This supercedes any limits on the entry of Actions Taken defined in relational edits 14-20.
165	Basic	C	Incident Type	If Incident Type is "611 Cancelled en-route" then the Property Use and Casualty fields are not required on the Basic Module.
166	System		State Code	A State code of 'OO Other' is never allowed as a valid state code entry for the Incident Header and Fire Department Header Transactions (transaction types 1000, 2000, 2010, 2020).
167	Fire	E2	Factors Contributing to Ignition	Do not allow the entry of code 71 (Exposure) in the Factors Contributing to Ignition field on the Fire Module if the basic incident's main Exposure Number field is 0.
168	Basic	F	Actions Taken	Generate a user warning message if one of the Basic incident Action Taken codes is 93 (Cancelled en-route) and the Incident Type is not 611 (Cancelled en-route).

Incident Module Rules

TABLE 3-3. NFIRS 5.0 Incident Module Rules

Reference #	Rule
1	The Basic Module is always required for Incident Types: 100-911
2	If Incident Type = 571 (stand by) and if Aid Given or Received = codes 3, 4 or 5, then only the information on the Basic module through Block D (Aid Given or Received) need be completed by the department giving aid. The rest of the Basic Module and the other modules as applicable are optional.
3	If Incident Type = any other Incident Type than 571 and if Aid Given or Received = codes 3, 4 or 5, and the "THEIR FDID" information in Block D is entered, then only the information on the Basic module through block G1 (Resources) and the Fire Fighter Casualty Module (when there is a casualty which, including additionally Block H1 on Basic) must be completed by the department giving aid. The remainder of the Basic module and any other modules associated with the incident may be optionally completed but are not required. The information not captured by the department giving aid will be captured by the department that receives aid for that incident.
4	Aid Giving Departments and Aid Receiving Departments always track their own Fire Service casualties separately. If a Fire Service Casualty occurs in a department giving aid, they should also complete the H1 Casualties block on the Basic Module in addition to the FS Casualty Module.
5	The department receiving aid is responsible for tracking and entering all of the civilian casualty information for the incident.
6	If aid is given (codes 3, 4 or 5), then only the information on the Basic module through block G1 (Resources) must be completed by the department giving aid unless a fire service casualty also occurs, then the giving department must also complete the Fire Service Casualty Module. The remainder of the Basic module and any other modules associated with the incident may be optionally completed but are not required. The information not captured by the department giving aid is captured by the department that receives aid for that incident.
7	The Fire Module is always required for the following Incident Types with no exceptions: 110-112, 120-138, 161-164 (160 is not included here because that code can be a wildland fire)
8	The Fire Module for is never (ever) allowed for: 200-911
9	The Fire Module is optional for the following Incident Types: 113-118, 150-155
10	If the Wildland Module is not used in place of the Fire Module, then the Fire Module must be completed for Incident Types: 140-143, 160, 170-173
11	The Structure Fire Module is always required for Incident Types: 111-112 (Only the Structure Type element is required on the Structure Module for code 112, the rest of the module is optional) 120-123
12	The Structure fire Module is never allowed for Incident Types: 130-173
13	The Structure fire Module is optional for Incident Types: 113-118
14	If the Fire Module is not used in place of the Wildland Module, then the Wildland Fire Module must be completed for Incident Types: 140-143, 160, 170-173
15	The Wildland Module is optional for Incident Types: 561, 631, 632
16	The Wildland Module is never allowed for Incident Types: 100-138, 150-155, 161-164, 200-555, 571-621, 641-911
17	If used, the Arson Module is only allowed for Incident Types: 100-173 (Fire Cause field code on the Fire Module must also be '1 Intentional' or '2 Unintentional' or '5 Cause under investigation' or 'U Undetermined after investigation'. If the Wildland Module is used instead, the Wildland Fire Cause must be '7 Intentional'.)
18	If used, the EMS module is only allowed for Incident Types: 100-243, 311, 321-323, 351-381, 400-431, 451, 900
19	If used, the HazMat module is only allowed for Incident Types: 100-243, 321-323, 371, 400-431, 451, 900

System Field Security Levels

The following table lists the default security level for each field in the NFIRS 5.0 system. The security level is the highest level at which the data in the field may be released from the national system. Please note that these are the default settings and may be configured differently at the option of individual states or fire departments. The purpose of these settings is to prevent data from being released publicly at the federal level when to do so would conflict with state or local jurisdiction privacy laws.

Sensitive data (marked as anything other than “Federal” in the table below) transmitted by vendor software and collected by the USFA NFIRS 5.0 software will be handled in the following manner once it is in the that system:

Data fields that are marked “Fire Department” in the table are collected and stored in the state database but may not be released publicly without permission of the originating fire department.

Data fields that are marked “State” in the table are collected and stored in the Federal Database but may not be released publicly without permission of the originating state.

These data security rules are in effect once the data passes into the USFA software system via transaction file.

TABLE 3-4. System Field Security Levels (Sheet 1 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
1			Basic Module			
1	A	D	State	2	C	National
1	A	D	FDID	5	X	National
1	A	D	Incident Date	8	D	National
1	A	D	Station	3	X	National
1	A	D	Incident Number	7	N	National
1	A	D	Exposure	3	N	National
1	B		Location			
1	B	S	Wildland Address Elsewhere Flag	1	Y	National
1	B	D	Location Type	1	C	National
1	B	D	Census Tract	6	X	National
1	B	D	Number/Milepost	8	N	National
1	B	D	Street Prefix Direction	2	C	National
1	B	D	Street or Highway Name	20	X	National
1	B	D	Street Type	4	C	National
1	B	D	Street Suffix	2	X	National
1	B	D	Apt or Suite	15	X	National
1	B	D	City	20		National
1	B	D	State	2	C	National
1	B	D	Zip	9	N	National
1	B	D	Cross Street or Directions	20	X	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 2 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
1	C	D	Incident Type	4	C	National
1	D		Aid Given / Received			
1	D	D	Aid Type	1	C	National
1	D	D	FDID Receiving Aid	5	X	National
1	D	D	State	2	C	National
1	D	D	Incident Number of Receiving Aid	7	N	National
1	E1		Dates & Times			
1	E1	D	Alarm Date	8	N	National
1	E1	D	Alarm Time	6	N	National
1	E1	S	Arrival Date Flag	1	Y	National
1	E1	D	Arrival Date	8	N	National
1	E1	D	Arrival Time	6	N	National
1	E1	S	Controlled Date Flag	1	Y	National
1	E1	D	Controlled Date	8	N	National
1	E1	D	Controlled Time	6	N	National
1	E1	S	Last Unit Cleared Date Flag	1	Y	National
1	E1	D	Last Unit Cleared Date	8	N	National
1	E1	D	Last Unit Cleared Time	6	N	National
1	E2	D	Shifts or Platoon	1	X	National
1	E2	D	Alarms	2	X	National
1	E2	D	District	3	X	National
1	E3	D	Special Study #1	4	X	National
1	E3	D	Special Study #2	4	X	National
1	F	D	Actions Taken #1	3	C	National
1	F	D	Actions Taken #2	3	C	National
1	F	D	Actions Taken #3	3	C	National
1	G1		Resources			
1	G1	S	Resource Form Use Flag	1	Y	National
1	G1	D	Suppression Apparatus	4	N	National
1	G1	D	Suppression Personnel	4	N	National
1	G1	D	EMS Apparatus	4	N	National
1	G1	D	EMS Personnel	4	N	National
1	G1	D	Other Apparatus	4	N	National
1	G1	D	Other Personnel	4	N	National
1	G1	D	Resource Count Includes Aid Received Flag	1	Y	National
1	G2		Estimated Dollar Losses & Values			
1	G2	D	Property \$ Loss	9	N	National
1	G2	S	Property Loss-None Flag	1	Y	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 3 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
1	G2	D	Contents \$ Loss	9	N	National
1	G2	S	Contents Loss-None Flag	1	Y	National
1	G2	D	Pre-Incident Property Value	9	N	National
1	G2	S	Pre-Incident Property None Flag	1	Y	National
1	G2	D	Pre-Incident Contents Value	9	N	National
1	G2	S	Pre-Incident Contents None Flag	1	Y	National
1	H1		Casualties			
1	H1	S	Casualties-None Flag	1	Y	National
1	H1	D	Fire Service Deaths	3	N	National
1	H1	D	Fire Service Injuries	3	N	National
1	H1	D	Other Deaths	3	N	National
1	H1	D	Other Injuries	3	N	National
1	H2	D	Detector Alerted Occupants	2	C	National
1	H3	D	HazMat Released	2	C	National
1	I	D	Mixed Use	3	C	National
1	J	D	Property Use	4	C	National
1	K1		Person/Entity Involved			
1	K1	D	Business Name	25	X	National
1	K1	D	Telephone Number	10	N	National
1	K1	D	Mr., Ms, or Mrs.	3	X	National
1	K1	D	First Name	15	X	State
1	K1	D	MI	1	X	State
1	K1	D	Last Name	25	X	State
1	K1	D	Name Suffix	3	X	State
1	K1	S	Same Address as Incident Flag	1	Y	National
1	K1	D	Number/Milepost	8	X	National
1	K1	D	Prefix	2	C	National
1	K1	D	Street or highway	20	X	National
1	K1	D	Street Type	4	C	National
1	K1	D	Street Suffix	2	C	National
1	K1	D	Apt. or Suite	15	X	National
1	K1	D	City	20	X	National
1	K1	D	State	2	C	National
1	K1	D	Zip	9	N	National
1	K1	D	P. O. Box	10	X	National
1	K1	S	More People Involved Record Flag	1	Y	National
1	K2		Owner			
1	K2	S	Same Person Involved Flag	1	Y	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 4 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
1	K2	D	Business Name	25	X	National
1	K2	D	Telephone Number	10	N	National
1	K2	D	Mr., Mrs., or Ms	3	X	National
1	K2	D	First Name	15	X	State
1	K2	D	MI	1	X	State
1	K2	D	Last Name	25	X	State
1	K2	D	Name Suffix	3	X	State
1	K2	S	Same Address as Incident Flag	1	Y	National
1	K2	D	Number/Milepost	8	X	National
1	K2	D	Prefix	2	C	National
1	K2	D	Street or highway	20	X	National
1	K2	D	Street Type	4	C	National
1	K2	D	Street Suffix	2	C	National
1	K2	D	Apt. or Suite	15	X	National
1	K2	D	City	20	X	National
1	K2	D	State	2	C	National
1	K2	D	Zip	9	N	National
1	K2	D	P. O. Box	10	X	National
1	L1	S	Remarks	255	X	State
1	M		Authorization			
1	M	D	Officer in Charge ID	6	X	State
1	M	D	Last Name, Officer in Charge	25	X	State
1	M	D	First Name, Officer in Charge	15	X	State
1	M	D	Middle Initial, Officer in Charge	1	X	State
1	M	D	Position or rank, Officer in Charge	10	X	State
1	M	D	Assignment, Officer in Charge	10	X	State
1	M	D	Date, Officer in Charge	8	N	State
1	M	S	Same as Officer Flag	1	Y	State
1	M	D	Member Making Report ID	6	X	State
1	M	D	Last Name, Member Making Report	25	X	State
1	M	D	First Name, Member Making Report	15	X	State
1	M	D	Middle Initial, Member Making Report	1	X	State
1	M	D	Position or rank, Member Making Report	10	X	State
1	M	D	Assignment, Member Making Report	10	X	National
1	M	D	Date, Member Making Report	8	N	National
1		S	Vender Identification Number	5	N	National
1		D	NFIRS Version Number	2.2	F	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 5 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
2 Fire Module						
2	A	D	State	2	C	National
2	A	D	FDID	5	X	National
2	L	D	Incident Date	8	D	National
2	A	D	Station	3	X	National
2	A	D	Incident Number	7	N	National
2	A	D	Exposure	3	N	National
2	A	D	Delete/Change	1	X	National
2	B		Property Detail			
2	B1	D	Not Residential Flag	1	Y	National
2	B1	D	Number of Residential units	4	N	National
2	B2	D	# of Bldg. Involved	3	N	National
2	B2	S	Bldg. not Involved Flag	1	Y	National
2	B3	D	Acres Burned	6	N	National
2	B3	D	Acres Burn None/Less than one acre	1	N	National
2	C		On-Site Materials or Products			
2	C	S	On Site Materials or Products None Flag	1	Y	National
2	C	D	Material # 1	4	C	National
2	C	D	Storage Use #1 (BPPR)	1	C	National
2	C	D	Material # 2	4	C	National
2	C	D	Storage Use #2 (BPPR)	1	C	National
2	C	D	Material # 3	4	C	National
2	C	D	Storage Use #3 (BPPR)	1	C	National
2			Ignition			National
2	D1	D	Area of Fire Origin	3	C	National
2	D2	D	Heat Source	3	C	National
2	D3	D	Item First Ignited	3	C	National
2	D3a	S	Check box if fire is confined to object of origin	1	Y	National
2	D4	D	Type of Material	3	C	National
2	E1		Cause of Ignition			
2	E1	S	Exposure Report Flag	1	Y	National
2	E1	D	Cause of Ignition	2	C	National
			Factor Contributing to Ignition			National
2	E2	D	Factor Contributing None Flag	1	Y	National
2	E2	S	Factor Contributing to Ignition (1)	3	C	National
2	E2	D	Factor Contributing to Ignition (2)	3	C	National
2	E3		Human Factors			
2	E3	S	Human Factors Contributing None (Flag)	1	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 6 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
2	E3	D	Human Factor - Asleep	1	C	National
2	E3	D	Human Factor - Impaired by Alcohol	1	C	National
2	E3	D	Human Factor - Unattended person	1	C	National
2	E3	D	Human Factor - Mentally disabled	1	C	National
2	E3	D	Human Factor - Physically disabled	1	C	National
2	E3	D	Human Factor - Multiple persons.	1	C	National
2	E3	D	Human Factor - Estimated Age related	1	C	National
2	E3	D	Estimated Age of Person Involved	3	N	National
2	E3	D	Sex of Person Involved	1	C	National
2	F		Equipment Involved			
2	F1	D	Equipment Involved. in Ignition Flag	1	Y	National
2	F1	D	Equipment Involved	4	C	National
2	F1	D	Brand	25	X	National
2	F1	D	Model	25	X	National
2	F1	D	Serial #	25	X	National
2	F1	D	Year	4	X	National
2	F2	D	Equipment Power Source	3	C	National
2	F3	D	Equipment Portability	2	C	National
2	G	D	Suppression Factors None Flag	1	Y	National
2	G	D	Suppression Factor #1	4	C	National
2	G	D	Suppression Factor #2	4	C	National
2	G	D	Suppression Factor #3	4	C	National
2	H		Mobile Property			National
2	H1	D	Mobile Property None Flag	1	Y	National
2	H1	D	Mobile Property Involve & Type	2	C	National
2	H2	D	Mobile Property Type	3	C	National
2	H2	D	Mobile Property Make	3	C	National
2	H2	D	Year	4	N	National
2	H2	D	Model	25	X	National
2	H2	D	License plate #	10	X	National
2	H2	D	State	2	C	National
2	H2	D	VIN #	17	X	National
3			Structure Fire Module			
3	I1	D	Structure Type	2	C	National
3	I2	D	Building Status	2	C	National
3	I3		Building Height			
3	I3	D	Number of Stories at/above grade	3	N	National
3	I3	D	Number of Stories below grade	2	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 7 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
3	I4		Size of Main Floor Area			
3	I4	D	Sq. Feet	8	N	National
3	I4	D	Length	4	N	National
3	I4	D	Width	4	N	National
3	J1	D	Floor of Origin	3	N	National
3	J1	D	Story of Origin, Below grade flag	1	Y	National
3	J2	D	Fire Spread	2	C	National
3	J3		# of Stories Damaged Flame			
3	J3	D	Minor Damage	3	N	National
3	J3	D	Significant Damage	3	N	National
3	J3	D	Heavy Damage	3	N	National
3	J3	D	Extreme Damage	3	N	National
3			Material Contributing to Flame Spread			
3	K	D	Material Contributing None Flag	1	Y	National
3	K1	D	Item Contributing Most to Spread	3	C	National
3	K2	D	Type of Material Contributing Most to Spread	3	C	National
3			Detector Performance			
3	L1	D	Presence of Detectors	2	C	National
3	L2	D	Type of Detection System	2	C	National
3	L3	D	Detector Power Supply	2	C	National
3	L4	D	Detector Operation	2	C	National
3	L5	D	Detector Effectiveness	2	C	National
3	L6	D	Detector Failure Reason	2	C	National
3	M		Automatic Extinguishment Systems			
3	M1	D	Presence of AES	2	C	National
3	M2	D	Type of AES	2	C	National
3	M3	D	Operation of Automatic Extinguishing System	2	C	National
3	M4	D	# of Sprinkler Heads Operating	3	N	National
3	M5	D	Reason for AES Failure	2	C	National
4	Civilian Fire Casualty Module					
4	A	D	State	2	C	National
4	A	D	FDID	5	X	National
4	A	D	Incident Date	8	D	National
4	A	D	Station	3	X	National
4	A	D	Incident Number	7	N	National
4	A	D	Exposure	3	N	National
4	A	D	Delete/Change	1	A	National
4	B		Injured Person			

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 8 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
4	B	D	Gender	1	C	National
4	B	D	First Name	15	X	State
4	B	D	Middle Initial	1	X	State
4	B	D	Last Name	25	X	State
4	B	D	Name Suffix	3	X	State
4	C	D	Casualty Number	3	N	National
4			Age or Date of Birth			
4	D	D	Age	6	N	National
4	D	S	Months for Infants	1	Y	National
4	D	S	Date of Birth	8	N	State
4	E1	D	Race	2	C	National
4	E2	D	Ethnicity, Hispanic	2	C	National
4	F	D	Affiliation	2	C	National
4	G	D	Date of Injury	8	N	National
4	G	D	Time of Injury	6	N	National
4	H	D	Severity	2	C	National
4	I	D	Cause of Injury	2	C	National
4	J		Human Factors Contributing			
4	J	D	Human Factors None	1	C	National
4	J	D	Asleep	1	C	National
4	J	D	Unconscious	1	C	National
4	J	D	Possible Alcohol Involved	1	C	National
4	J	D	Possible Drugs Involved	1	C	National
4	J	D	Mentally Challenged	1	C	National
4	J	D	Physically Challenged	1	C	National
4	J	D	Physically restrained	1	C	National
4	J	D	Unattended person	1	C	National
4	K		Factors Contributing to Injury			
4	K	S	Contributing Factors None Box	1	Y	National
4	K	D	Contributing Factors 1	3	C	National
4	K	D	Contributing Factors 2	3	C	National
4	K	D	Contributing Factors 3	3	C	National
4	L	D	Activity When Injured	2	C	National
4	M1	D	Location at Time of Incident	2	C	National
4	M2	D	General Location at Time of Injury	2	C	National
4	M3	D	Story at Start of Injury	3	N	National
4	M3	D	Story at Start of Injury Below Grade Flag	1	Y	National
4	M4	D	Story where Injury Occurred	3	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 9 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
4	M4	D	Story where Injury Occurred Below Grade Flag	1	Y	National
4	M5	D	Specific Location at Time of Injury	3	C	National
4	N	D	Primary Apparent Symptom	3	C	National
4	O	D	Primary Part of Body Injured	2	C	National
4	P	D	Disposition	2	C	National
5 Fire Service Casualty Module						
5	A	D	State	2	C	National
5	A	D	FDID	5	X	National
5	A	D	Incident Date	8	D	National
5	A	D	Station	3	X	National
5	A	D	Incident Number	7	N	National
5	A	D	Exposure	3	N	National
5	A	D	Delete/Change	1	X	National
			Injured Person			
5	B	D	Identification Number	9	X	Fire Department
5	B	D	Gender	1	C	National
5	B	D	Career/Volunteer	1	C	National
5	B	D	First Name	15	X	State
5	B	D	Middle Initial	1	X	State
5	B	D	Last Name	25	X	State
5	B	D	Name Suffix	3	X	State
5	C	D	Casualty Number	3	N	National
5	E	D	Date of Injury	8	N	National
5	E	D	Time of Injury	6	N	National
5	D	D	Age	3	N	National
5	D	S	Date of Birth	8	N	State
5	F	D	Number of Responses during past 24 hours	2	N	National
5	G1	D	Usual Assignment	2	C	National
5	G2	D	Physical Condition Just Prior to Injury	2	C	National
5	G3	D	Severity	2	C	National
5	G4	D	Taken to	2	C	National
5	G5	D	Activity at Time of Injury	3	C	National
5	H1	D	Primary Apparent Symptom	3	C	National
5	H2	D	Primary Injured Body Part	3	C	National
5	I1	D	Cause of Firefighter Injury	3	C	National
5	I2	D	Contributing Factor	3	C	National
5	I3	S	Object Involved in Injury - None	1	Y	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 10 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
5	I3	D	Object Involved in Injury	3	C	National
5	J1	D	Where Injury Occurred	2	C	National
5	J2	D	Below Grade Flag	1	Y	National
5	J2	D	Stories or Floor where injury occurred	3	N	National
5	J3	D	Specific Location	3	C	National
5	J4	D	Vehicle Type	2	C	National
5	K	D	Did Protective Equip fail and/or contribute to injury?	1	C	National
			Equipment Involved in Injury			
5	K1	D	Equipment Involved in Injury Sequence Number	3	N	National
5	K2	D	Equipment Item	3	C	National
5	K3	D	Equipment Problem	3	C	National
5	K4	D	Equipment Manufacturer	12	X	National
5	K4	D	Equipment Model	12	X	National
5	K4	D	Equipment Serial Number	12	X	National
6	EMS Module					
6	A	D	State	2	C	National
6	A	D	FDID	5	X	National
6	A	D	Incident Date	8	D	National
6	A	D	Station	3	X	National
6	A	D	Incident Number	7	N	National
6	A	D	Exposure	3	N	National
6	A	D	Delete/Change	1	X	National
6			Casualty Information			
6	B	D	Number of Patients	3	N	National
6	B	D	Patient Number	3	N	National
6			Dates & Times			
6	C	D	Arrived at Patient Date	8	N	National
6	C	D	Arrived at Patient Time	6	N	National
6	C	D	Patient Transfer Date	8	N	National
6	C	D	Patient Transfer Time	6	N	National
6	D	D	Provider Impression/Assessment	3	C	National
6			Age/Date of Birth			
6	E1	D	Age	6	N	National
6	E1	S	Months for Infants	1	Y	National
6	E1	S	Date of Birth	8	N	State
6	E2	D	Gender	1	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 11 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
6	F1	D	Race	2	C	National
6	F2	D	Ethnicity	2	C	National
6	G1	D	Human Factors			
6	G1	S	Human Factors None	1	Y	National
6	G1	D	Asleep	1	C	National
6	G1	D	Unconscious	1	C	National
6	G1	D	Possibly Impaired by Alcohol	1	C	National
6	G1	D	Possibly Impaired by Drugs	1	C	National
6	G1	D	Mentally Disabled	1	C	National
6	G1	D	Physically Disabled	1	C	National
6	G1	D	Physically Restrained	1	C	National
6	G1	D	Unattended person	1	C	National
6	G2	D	Other Factors			
6	G2	D	Accidental	1	C	National
6	G2	D	Self-Inflicted	1	C	National
6	G2	D	Inflicted, not self	1	C	National
6	H1		Body Site of Injury			
6	H1	D	Body Site # 1	2	C	National
6	H1	D	Body Site # 2	2	C	National
6	H1	D	Body Site # 3	2	C	National
6	H1	D	Body Site # 4	2	C	National
6	H1	D	Body Site # 5	2	C	National
6	H2		Injury Type			
6	H2	D	Injury Type # 1	3	C	National
6	H2	D	Injury Type # 2	3	C	National
6	H2	D	Injury Type # 3	3	C	National
6	H2	D	Injury Type # 4	3	C	National
6	H2	D	Injury Type # 5	3	C	National
6	H3		Cause of Illness/Injury			
6	H3	D	Cause of Illness/Injury # 1	3	C	National
6	K		Cardiac Arrest			
6	K	D	Pre-Arrival Arrest	1	C	National
6	K	D	Witnessed	1	C	National
6	K	D	Bystander CPR	1	C	National
6	K	D	Post-Arrival Arrest	1	C	National
6	K	D	Initial Arrest Rhythm	2	C	National
6	J	D	Safety Equipment	1	C	National
6	I	D	Procedures Used	2	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 12 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
6	L1	D	Initial Level of Care	2	C	National
6	L2	D	Highest Level of Provider at Scene	2	C	National
6	M	D	Patient Status	2	C	National
6	M	D	Pulse on Transfer	1	Y	National
6	N	D	Disposition	2	C	National
7 HazMat Module						
7	A	D	State	2	C	National
7	A	D	FDID	5	X	National
7	A	D	Incident Date	8	D	National
7	A	D	Station	3	X	National
7	A	D	Incident Number	7	N	National
7	A	D	Exposure	3	N	National
7	A	D	HazMat Number	2	N	National
7	A	D	Delete/Change	1	X	National
7	B		HazMat ID			National
7	B	D	UN Number	4	X	National
7	B	D	DOT Hazard Classification	2	C	National
7	B	D	CAS Registration Number	10	C	National
7	B	D	Name of Chemical or Material (Code)	7	C	National
7	C1	D	Container Type	3	C	National
7	C2	D	Estimated Container Capacity	9	N	National
7	C3	D	Capacity Units	3	C	National
7	D1	D	Estimated Amount Release	9	N	National
7	D2	D	Released Units	3	C	National
7	E1	D	Physical State When Released	2	C	National
7	E2	D	Released Into Air	1	C	National
7	F1		Released From			National
7	F1	D	Release (inside/outside)	1	C	National
7	F1	D	Story of Release	3	N	National
7	F1	D	Below Grade	1	Y	National
7	F2	D	Population Density	2	C	National
7	G1	D	Area Affected	4	N	National
7	G1	D	Area Affected Unit	2	C	National
7	G2	D	Area Evacuated	4	N	National
7	G2	S	Area Evacuated - None	1	Y	National
7	G2	D	Area Evacuated Unit	2	C	National
7	G3	D	Estimated Number of People Evacuation	6	N	National
7	G3	D	Estimated Number - None	1	Y	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 13 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
7	G4	D	Estimated Number of Building Evacuated	4	N	National
7	G4	S	Estimated Number of bldg. - None	1	Y	National
7	H	D	HazMat Actions Taken # 1	3	C	National
7	H	D	HazMat Actions Taken # 2	3	C	National
7	H	D	HazMat. Actions Taken # 3	3	C	National
7	I	D	If fire or explosion is involved with incident, Which Occurred First?	2	C	National
7	J	D	Cause of Release	2	C	National
7	K		Factors Contributing to Release			National
7	K	D	Factors #1	3	C	National
7	K	D	Factors #2	3	C	National
7	K	D	Factors #3	3	C	National
	L		Factors Affecting Mitigation			National
7	L	D	Mitigating Factors #1	3	C	National
7	L	D	Mitigating Factors #2	3	C	National
7	L	D	Mitigating Factors #3	3	C	National
7	M		Equipment Involved in Release			National
7	M	D	No Equipment Involved in Release Flag	1	Y	National
7	M	D	Equipment Involved	4	C	National
7	M	D	Brand	25	X	National
7	M	D	Model	25	X	National
7	M	D	Serial #	25	X	National
7	M	D	Year	4	N	National
7	M		Mobile Property			National
7	N	D	Mobile Property None Flag	1	Y	National
7	N	D	Mobile Property Involved	2	C	National
7	N	D	Make	2	C	National
7	N	D	Year	4	N	National
7	N	D	Model	25	X	National
7	N	D	License plate #	10	X	National
7	N	D	State	2	C	National
7	N	D	DOT Number / ICC Number/VIN #	17	X	National
7	O	D	Disposition	2	C	National
7	P	D	HazMat Deaths	4	N	National
7	P	D	HazMat Injuries	4	N	National
8 Wildland Module						
8	A	D	State	2	C	National
8	A	D	FDID	5	X	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 14 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
8	A	D	Incident Date	8	D	National
8	A	D	Station	3	X	National
8	A	D	Incident Number	7	N	National
8	A	D	Exposure	3	N	National
8	A	D	Delete/Change	1	X	National
8	B		Alternate Location Specification			National
8	B	D	Latitude	5	N	National
8	B	D	Longitude	6	N	National
8	B	D	Township	4	X	National
8	B	D	Township Direction	1	C	National
8	B	D	Range	3	X	National
8	B	D	Range Direction	1	C	National
8	B	D	Section	2	X	National
8	B	D	Subsection	4	X	National
8	B	D	Meridian	2	X	National
8	C	D	Area Type	1	X	National
8	D1	D	Wildland Fire Cause	1	X	National
8	D2		Human Factors			National
8	D2	D	Human Factors Contributing, None	1	C	National
8	D2	D	Human Factor - Asleep	1	C	National
8	D2	D	Human Factor - Impaired by Alcohol	1	C	National
8	D2	D	Human Factor - Unattended person	1	C	National
8	D2	D	Human Factor - Mentally disabled	1	C	National
8	D2	D	Human Factor - Physically disabled	1	C	National
8	D2	D	Human Factor - Multiple persons.	1	C	National
8	D2	D	Human Factor - Age was a factor	1	C	National
			Factor Contributing to Ignition			National
8	D3	D	Factor Contributing to Ignition (1)	3	C	National
8	D3	D	Factor Contributing to Ignition (2)	3	C	National
8	D4		Fire Suppression Factors			National
8	D4	D	Factor # 1	4	C	National
8	D4	D	Factor # 2	4	C	National
8	D4	D	Factor # 3	4	C	National
8	E	D	Heat Source	3	C	National
8	F	D	Mobile Property Type	3	C	National
8	G	D	Equipment Involved	4	C	National
8	H	D	Weather Station ID	6	X	National
8	H	D	Weather Type	2	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 15 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
8	H	D	Wind Direction	1	C	National
8	H	D	Wind Speed	3	N	National
8	H	D	Temperature	4	N	National
8	H	S	Negative Temp. Flag	1	X	National
8	H	D	Humidity	3	N	National
8	H	D	Fuel Moisture	2	N	National
8	H	D	Fire Danger Rating	1	C	National
8	I1	S	Number of Bldg. Involved Flag	1	N	National
8	I2	D	Number of Bldg. Involved	3	N	National
8	I3	D	Total Acres Burned	11	N	National
8	I4	D	Primary Crops Burned - Crop 1	25	X	National
8	I4	D	Primary Crops Burned - Crop 2	25	X	National
8	I4	D	Primary Crops Burned - Crop 3	25	X	National
8			Property Management			National
8	J	D	Property Mgmt. - Code	2	C	National
8	J	D	% of Total Acres Burned - Undetermined	3	N	National
8	J	D	% of Total Acres Burned - Tax paying	3	N	National
8	J	D	% of Total Acres Burned - Non tax paying	3	N	National
8	J	D	% of Total Acres Burned - City town, village, local	3	N	National
8	J	D	% Total Acres Burned - County	3	N	National
8	J	D	% of Total Acres Burned - State or province	3	N	National
8	J	D	Federal Agency Code	5	X	National
8	J	D	% of Total Acres Burned - Federal	3	N	National
8	J	D	% of Total Acres Burned - Foreign	3	N	National
8	J	D	% of Total Acres Burned - Military	3	N	National
8	J	D	% of Total Acres Burned - Other	3	N	National
8	K	D	NFDRS Fuel Model At Origin	2	C	National
8	L1	D	Person Responsible for Fire	1	C	National
8	L2	D	Person Involved Gender	1	C	National
8	L3	D	Age	6	N	National
8	L3	S	Date of Birth	8	N	National
8	L4	D	Activity of Person	2	C	National
8	M	D	Horizontal Distance from Right of Way	2	N	National
8	M	D	Type of Right of Way	3		National
8			Fire Behavior			National
8	N	D	Elevation in Feet	5	N	National
8	N	D	Relation	1	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 16 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
8	N	D	Aspect	1	C	National
8	N	D	Flame Length	2	N	National
8	N	D	Rate of spread (Chains per hour)	3	N	National
9 Apparatus Module						
9	A	D	State	2	C	National
9	A	D	FDID	5	X	National
9	A	D	Incident Date	8	D	National
9	A	D	Station	3	X	National
9	A	D	Incident Number	7	N	National
9	A	D	Exposure	3	N	National
9	B	D	Apparatus or Resource Record Number	4	N	National
9	B	D	Delete/Change	1	X	National
9	B	D	ID of Apparatus or Resource	5	X	National
9	B	D	Type of Apparatus or Resource	2	C	National
9	B	S	Dispatch Flag	1	Y	National
9	B	D	Dispatch Date	8	N	National
9	B	D	Dispatch Time	4	N	National
9	B	S	Clear Flag	1	Y	National
9	B	D	Clear Date	8	N	National
9	B	D	Clear Time	4	N	National
9	B	S	Arrive Flag	1	Y	National
9	B	D	Arrive Date	8	N	National
9	B	D	Arrive Time	4	N	National
9	B	I	Sent			National
9	B	D	Number of People	3	N	National
9	B	D	Use	1	X	National
9	B	D	Action#1	3	C	National
9	B	D	Action#2	3	C	National
9	B	D	Action#3	3	C	National
9	B	D	Action#4	3	C	National
10 Personnel Module						
10	A	D	State	2	C	National
10	A	D	FDID	5	X	National
10	A	D	Incident Date	8	D	National
10	A	D	Station	3	X	National
10	A	D	Incident Number	7	N	National
10	A	D	Exposure	3	N	National
10	B	D	Personnel Record Number	4	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 17 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
10	B	D	Delete/Change	1	X	National
10	B	D	ID of Apparatus or Resource	5	X	National
10	B	D	Type of Apparatus or Resource	3	C	National
10	B	S	Dispatch Flag	1	Y	National
10	B	D	Dispatch Date	8	N	National
10	B	D	Dispatch Time	4	N	National
10	B	S	Arrival Flag	1	Y	National
10	B	D	Arrival Date	8	N	National
10	B	D	Arrival Time	4	N	National
10	B	S	Clear Flag	1	Y	National
10	B	D	Clear Date	8	N	National
10	B	D	Clear Time	4	N	National
10	B	I	Sent			National
10	B	D	Number of People	3	N	National
10	B	D	Use	1	C	National
10	B		Apparatus or Resource Actions Taken			National
10	B	D	Action #1	3	C	National
10	B	D	Action #2	3	C	National
10	B	D	Action #3	3	C	National
10	B	D	Action #4	3	C	National
10	B	D	Personnel ID	9	X	Fire Department
10	B	D	Name	36	X	Fire Department
10	B	D	Rank or Grade	6	X	National
10	B	I	Attend			National
10	B		Personnel Actions Taken			National
10	B	D	Action #1	3	C	National
10	B	D	Action #2	3	C	National
10	B	D	Action #3	3	C	National
10	B	D	Action #4	3	C	National
11 Arson Module						
11	A	D	State	2	C	National
11	A	D	FDID	5	X	National
11	A	D	Incident Date	8	D	National
11	A	D	Station	3	X	National
11	A	D	Incident Number	7	N	National
11	A	D	Exposure	3	N	National
11	A	D	Delete/Change	1	X	National
11	B		Agency Referred to			National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 18 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
11	B	D	Agency Name	30	X	National
11	B		Agency Street Address			National
11	B	D	Agency Street Number	8	N	National
11	B	D	Agency Street Prefix	2	C	National
11	B	D	Agency Street or Highway Name	30	X	National
11	B	D	Agency Street Type	4	C	National
11	B	D	Agency Street Suffix	2	X	National
11	B	D	Agency Apt or Suite	15	X	National
11	B	D	Agency City	20	A	National
11	B	D	Agency State	2	C	National
11	B	D	Agency Zip Code	9	N	National
11	B	D	Their case #	12	X	National
11	B	D	Their ORI	5	X	National
11	B	D	Their FID	2	X	National
11	B	D	Their FDID	5	X	National
11	C	D	Case Status	1	C	National
11	D	D	Availability of Ignition Source	1	C	National
11	E	D	Suspected Motivation Factors	2	C	National
11	F	D	Apparent Involvement	1	C	National
11	G1	D	Entry Method	2	C	National
11	G2	D	Extent of Fire Involvement on Arrival	1	C	National
11	H	D	Methods, Devices			National
11	H	D	Container	2	C	National
11	H	D	Delay Device	2	C	National
11	H	D	Fuel	2	C	National
11	I	D	Other Investigative Information	1	C	National
11	J	D	Property Ownership	1	C	National
11	K	D	Initial Observations	1	C	National
11	L	D	Laboratory Used	1	C	National
11	M1	S	Subject Number	3	N	National
11	M2	D	Age	6	N	National
11	M2	D	Date of Birth	8	N	National
11	M3	D	Gender	1	C	National
11	M4	D	Race	1	C	National
11	M5	D	Ethnicity	1	C	National
11	M6	D	Family Type	1	C	National
11	M7	D	Motivation, Risk Factors	1	C	National
11	M8	D	Disposition	1	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up

2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 19 of 19)

Module No.	Line	Element Type	Element	Size	Field Type	Security Level
X			Supplemental Paper Form			National
			Same as K1 on Module #2			National
X			Fire Department ID Record			
		D	FDID	5	X	National
		D	State Code	2	C	National
		D	FIPS County code	3	X	National
		D	FIP County Name	15	X	National
		D	Department Name	30	X	National
		D	Number of Stations	3	N	National
		D	Address	25	X	National
		D	City	20	X	National
		D	State	2	C	National
		D	Zip	9	N	National
		D	Population Protected	8	N	National
		D	Population Density	1	C	National
		D	Number of Paid	4	N	National
		D	Number of Volunteer, Paid per Call	4	N	National
		D	Number of Volunteer, not paid	4	N	National
		D	Telephone Number	10	N	National
		D	Fax Number	10	N	National
		D	E-Mail Address	45	X	National
		D	Square Miles	6	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

Incident Flat File Transfer Format

Overview

This section explains some of the conventions used in documenting the NFIRS 5.0 Incident Transaction File Format.

Transaction Record Hierarchy

The incident transaction records have been designed under the assumption that if a particular piece of information has not been collected as part of an incident, an empty record should not be transmitted. To accomplish this, a transaction hierarchy has been created so a parent transaction can be sent with only those applicable child transactions.

Example:

If aid was not given or received during an incident, the Aid Given or Received Transaction (1020) doesn't need to be transmitted.

However, it must be mentioned, that if a transaction record is empty at the time of transmittal, but child transactions to that record are not, an empty parent transaction is required.

Example:

If the Mobile Property section of the Fire Form has been filled out, but the remainder of the Fire Form has not been entered, an empty Fire Form Transaction (1100) would need to be sent along with the Fire Mobile Property Transaction (1120). Note: The Fire Equipment Involved Transaction (1130) and File Attached Transaction (1110) would not need to be included, since they are child transactions and are empty.

All child transactions need to be included in the transaction file, after their corresponding parent transaction (although how many records after the parent transaction is irrelevant, as long as it is prior to the next incident).

Table 3-5, "Transaction Hierarchy Table," on page 128 depicts the Incident Transaction Hierarchy and the associated Parent/Child relationships.

TABLE 3-5. Transaction Hierarchy Table

(1000) Incident Header Transaction
(1005) Basic Incident Transaction
(1010) Incident Address Transaction
(1020) Aid Given and Received Transaction
(1030) Officer in Charge Authority Transaction
(1035) Member Making Report Authority Transaction
(1040) Incident Remarks Transaction
(1050) Incident Persons Involved Transactions
(1055) Incident Owner Transaction
(1060) Incident Special Studies Transactions
(1100) Fire Form Transaction
(1110) File Attached Transaction
(1120) Fire Mobile Property Involved Transaction
(1130) Fire Equipment Involved Transaction
(1200) Structure Fire Form Transaction
(1300) Wildland Form Transaction
(1400) Civilian Fire Casualty Transactions
(1500) Fire Service Casualty Transactions
(1510) Fire Service Equipment Failure Transactions
(1600) EMS Patient Transaction
(1700) HazMat Transaction
(1710) HazMat Chemical Transactions
(1720) HazMat Mobile Property Involved Transaction
(1730) HazMat Equipment Involved Transaction
(1800) Incident Apparatus Transactions
(1810) Incident Personnel Transactions
(1900) Arson Transaction
(1910) Arson Agency Referral Transaction
(1920) Arson Juvenile Subject Transactions

Delimiters

Fields within the transaction record can be delimited using a character or series of characters defined by the creator of the transaction file. The first record in the file **MUST** be the delimiter. NOTE: The delimiter **MUST** be different from the sub-delimiter used to denote multiple choice answers, which is a semi-colon (;) (explained in detail below).

Transaction Record Termination

All records in the file must be terminated with a delimiter, followed by a carriage return, followed immediately by a line feed.

Vendor Identification and Software Identification

Each vendor and/or custom system will be assigned an alphanumeric Vendor Identification Number after they have been certified as NFIRS 5.0 compliant. Vendor Identification Numbers may be up to 10 characters in length.

In addition, each version of the software a vendor/state certifies will be assigned a unique alphanumeric Software Identification Number. The Software Identification Number may be up to 5 characters in length.

The second record in the file **MUST** contain both the vendor and software identification numbers.

Example:

Delimiter	^
Vendor XYZVendor Identification Number	12S22R69K
Software Version 1.1Software Identification Number	1234C
Vendor and Software Identification Record	12S22R69K^1234C^

Addition, Deletion, Change and No Activity Transaction Flags

Each paper based form for the NFIRS support a Delete/Change flag in section A. This convention has been mimicked in the transaction file format.

Each Transaction Record has a Transaction Type field, which can have the following values.

<u>Value</u>	<u>Transaction Type</u>
Blank	Addition
1	Change
2	Delete
3	No Activity

Add Incident

When a new incident is transmitted, the first record should be the Basic Incident Transaction. If this is not the first record of the new incident, a fatal error will be generated. All subsequent transactions are included with the incident until the key values change or the end of the file is reached.

Change and Delete Transaction

When an incident needs to be modified, a Change transaction should be transmitted. This includes changing records that already exists as well as transmitting new records for an existing incident (e.g. adding another casualty record to an existing incident). This change transaction must contain all the field values that should replace all the existing values for that transaction. (i.e. – If one field in a transaction changes, the entire transaction must be transmitted).

When a particular transaction has been removed from an incident, a Delete transaction should be transmitted. When a parent transaction is deleted, all child transactions for that parent are also deleted. If the Basic Incident Transaction is deleted, the entire incident is deleted. (Including any exposure record for fire incidents)

All transactions for an incident must appear at the same point in the transaction file. To ensure proper execution of change and delete transactions for an incident, they must be grouped into the following order.

- Changes to existing records for the incident
- Deletion of existing records for the incident (in descending sequence)
- Addition of new records for the incident (in ascending sequence)

Delete transactions **MUST** be grouped in descending sequence to ensure proper processing. For example, if three (3) casualty records exist for an incident and the last two (2) are to be deleted, the transactions should be transmitted as follows:

- Delete Casualty Number 3
- Delete Casualty Number 2

Addition transactions must be aware of any/all delete transactions that have been previously processed for the incident, and must use the appropriate sequence numbers. If in the above example, a new casualty were to be added after the delete transactions had been processed, the first casualty added must use Casualty number 2.

No Activity

No Activity transactions should only send the 1000 Incident Header Transaction. A code of "3" for No Activity should be entered in the Transaction Type (the 7th element) for these transactions".

Fire Department Transactions

The Fire Department Transactions records (record types 2000 through 2020) are provided for the transmission of specific fire department information. These records, when transmitted, need to be contained in a separate flat file (i.e. These records can not be transmitted as part of the incident flat file). When reporting begins under NFIRS 5.0, each department will need to submit an initial

Fire Department Header Record (record type 2000) in a separate flat file so that basic information about each department can be established in the State database.

Sequence Numbering Methodologies

When multiple records can occur for a single type of transaction, the transactions employ one of two possible numbering methodologies. For both types of methodologies, the numbers must be incremented by one (1). In addition, the transaction records must occur in the file in their ascending sequential order (although the transaction records do not necessarily need to appear one after the other).

Zero Based

Numbers starting at 0 and incrementing by 1.

One Based

Numbers starting at 1 and incrementing by 1.

Data Types Legend

A (Alphabetic)

Alphabetic characters. If the user has not provided information, an empty field should be transmitted.

X (Text)

Alphanumeric or special characters. If the user has not provided information, an empty field should be transmitted.

N (Numeric)

Integer numbers (no decimal points). If the user has not provided information, an empty field should be transmitted. All Integer values are assumed to be positive. Any fields which allow a negative Integer value have been denoted with "+" or "-" in the comment field. Negative numbers should be transmitted with the minus sign preceding the digits.

F (Floating Point)

Floating point precision numbers (The expected length column depicts the max left and right side precision). If the user has not provided information, an empty field should be transmitted.

C (Coded Field)

The coded field relating to an entry in the code table. Most coded fields allow for Plus+ One codes. For these fields the expected length of the coded entry is depicted as (National length OR Plus+ One length). Only fields with this notation in the expected length column allow for Plus+ One definitions. If the user has not provided information, an empty field should be transmitted.

Y (Yes/No)

A (Y)es/(N)o flag. NOTE: This is case sensitive and must be capital Y or N. If the user has not provided information, a value of N should be transmitted (if no value is transmitted, N is assumed).

Positive and Negative Numbers

Certain Numerical Fields can contain positive or negative numbers. When a numerical field has a value that is positive, only the number should be given and the field length requirements should be observed.

However, when a field value is negative, the number should be preceded by a minus sign (-), and the field length requirements should be observed, without accounting for the minus sign.

Multiple Choice Fields

Fields that permit multiple values (e.g. a multiple choice coded field) must use a semi-colon (;) to separate the coded values. The field must ALWAYS end with a semi-colon, EXCEPT if the field contains no values.

Example:

Delimiter: ^

User had selected the following coded values (1,22,30).

(Prior fields) ^1;22;30;^ (Subsequent fields)

Note: If the field had been empty, the transaction record would appear as follows:

(Prior fields) ^^ (Subsequent fields)

Multiple Choice fields allow for Plus+ One codes (described above). A 'MC' in the Comments column designates multiple Choice fields. In addition, the maximum number of responses allowed is noted in parenthesis.

If 'None' is the given response for a multiple choice questions, the 'None' code should be listed in the field. This allows for the critical differentiation between a 'None' response and a field which had no response.

Date and Time

Date and Time field responses can have the following notations in the transaction, depending on the type of field (Date Only or Date and Time).

<u>Field Type</u>	<u>Scenario</u>	<u>Field Format</u>
Date Only or Date and Time	No Date or Time Provided	Blank
Date Only		YYYYMMDD
Date and Time	Seconds not recorded	YYYYMMDDHHMM
Date and Time	Seconds recorded	YYYYMMDDHHMMSS

Zip Code

Zip Codes can be provided using either 5 or 9-digit notation. NOTE: No hyphens should be used when transmitting the 9-digit notation.

<u>Zip Code</u>	<u>Type Field Format</u>
5-digit Notation	NNNNN
9-digit notation	NNNNNNNNN

User Defined Transactions

User may define their own NFIRS 5.0 transaction types in order to collect data fields not specified in the national NFIRS 5.0 standard. These fields may be defined by states or by local fire departments for their own use locally. The 7000 transaction series is reserved for local fire department use. The 8000 series is reserved for state use. The 9000 series is currently reserved for future national expansion.

In order to properly set up a user defined transaction, use these guidelines:

1. Each user defined transaction must contain the first seven key fields in the Incident Header (1000) transaction before beginning the user defined fields.
2. The user defined transactions must follow the same format and rules defined in this document for standard NFIRS 5.0 transactions.

TABLE 3-6. Index of Transaction (Sheet 1 of 3)

Trans ID	Transaction	Form	Section	Number Record Expected	Comments
NA	Field Delimiter	NA	NA	1 per Transaction File	The first record in the transaction file must be the delimiter. The delimiter may be a multiple character string, and is used to delimit fields within all transaction records. NOTE: All transaction records must terminate with a delimiter.
N/A	Vendor ID and Software ID	NA	NA	1 per Transaction File	The second record in the transaction file must contain the Vendor ID, assigned as part of the vendor certification process and the software ID, for the particular version of the software used to generate the flat file. These fields need to be separated using the Field Delimiter.
1000	Incident Header	Basic	Section A	1 per Incident (Includes Exposure Transactions for Fire Incidents Only)	This transaction record contains the information collected as part of Section A. This record is the sole transaction required for No Activity incidents.
1005	Basic Incident	Basic	Section C, D, E1-E2, F, G1, G2, H1-H3,I,J	1 per Incident (Includes Exposure Transactions for Fire Incidents Only)	This transaction record contains the majority of the coded information contained on the Basic Form.
1010	Incident Address	Basic	Section B	0 or 1 per Basic Incident Transaction	This transaction record contains the incident address information captured as part of the Basic form.
1020	Aid Given and Received	Basic	Section D	0 or 1 per Basic Incident Transaction	This transaction record contains the information from the Aid Given and Received section of the Basic Form.
1030	Officer in Charge Authority	Basic	Section M	0 or 1 per Basic Incident Transaction	This transaction record contains the Officer in Charge information captured on the Basic Form.

TABLE 3-6. Index of Transaction (Sheet 2 of 3)

Trans ID	Transaction	Form	Section	Number Record Expected	Comments
1035	Member Making Report Authority	Basic	Section M	0 or 1 per Basic Incident Transaction	This transaction record contains the Member making report information captured on the Basic Form.
1040	Incident Remarks	Basic	Section L1	0 or 1 per Basic Incident Transaction	This transaction record contains all Remarks associated with the incident.
1050	Incident Persons Involved	Basic	Section K1	0 to 200 per Basic Incident Transaction	These transaction records contain the Person(s) Involved Information. Persons Involved captured on the Additional Form are included in this transaction record.
1055	Incident Owner	Basic	Section K2	0 or 1 per Basic Incident Transaction	This transaction record contains the Owner Information captured as part of the Basic Form.
1060	Incident Special Studies	Basic	E3	0 to 200 per Basic Incident Transaction	These transaction records contain the Special Study Information for a particular incident. One record exists for each special study associated with an incident.
1100	Fire	Fire	Section B1 - B3, C, D1 - D4, E1 - E3	0 or 1 per Basic Incident Transaction	This transaction record contains the majority of coded information captured on the Fire Form.
1110	File Attached	Fire	Local Use	0 or 1 per Fire Transaction	This transaction record contains the files attached information captured on the Fire Form.
1120	Fire Mobile Property Involved	Fire	Section H2	0 to 1 per Fire Transaction	This transaction record contains the Mobile Property Information that is gathered as part of the Fire Form.
1130	Fire Equipment Involved	Fire	Section F1	0 to 1 per Fire Transaction	This transaction record contains the Equipment Involved Information which is gathered as part of the Fire Form.
1200	Structure Fire	Structure Fire	All	0 or 1 per Basic Incident Transaction	This transaction record contains all the information captured on the Structure Fire Form.
1300	Wildland Fire	Wildland	All	0 or 1 per Basic Incident Transaction	This transaction record contains all the information captured on the Wildland Form.
1400	Civilian Fire Casualty	Civilian Fire Casualty	All	0 to many per Basic Incident Transaction	This transaction record contains all the information captured on the Civilian Fire Casualty Form.
1500	Fire Service Casualty	Fire Service Casualty	Section B - K1	0 to many per Basic Incident Transaction	This transaction record contains the majority of the information captured on the Fire Service Casualty Form.

TABLE 3-6. Index of Transaction (Sheet 3 of 3)

Trans ID	Transaction	Form	Section	Number Record Expected	Comments
1510	Fire Service Casualty Equipment Failure	Fire Service Casualty	Section K2 - K4	0 to 200 per Fire Service Casualty Transaction	These transaction records contain the protective equipment failure information captured as part of the Fire Service Casualty Form.
1600	EMS Patient	EMS	All	0 to many per Basic Incident Transaction	These transaction records contain the information captured on the EMS Form.
1700	HazMat	HazMat	Section F1 - L, O	0 or 1 per Basic Incident Transaction	This transaction record contains the information gathered for the first hazardous material in an incident.
1710	HazMat Chemicals	HazMat	Section B - E2	1 to 200 per HazMat Transaction	These transaction records contain the specific chemical information gathered on the HazMat Form.
1720	HazMat Mobile Property Involved	HazMat	Section N	0 to 1 per HazMat Transaction	This transaction record contains the Mobile Property Information that is gathered as part of the HazMat form.
1730	HazMat Equipment Involved	HazMat	Section M	0 to 1 per HazMat Transaction	This transaction record contains the Equipment Involved Information which is gathered as part of the HazMat Form.
1800	Incident Apparatus	Apparatus Form or Resources Form	NA	0 to 200 per Basic Incident Transaction	These transaction records contain the Apparatus information captured on the Apparatus Form and Resources Form.
1810	Incident Resources	Resources Form	NA	0 to 200 per Incident Apparatus Transaction	These transaction records contain the Resource information captured on the Resources Form.
1900	Arson	Arson	Section C-L	0 or 1 per Basic Incident Transaction	This transaction record contains the information gathered as part of the Federal Arson Module.
1910	Arson Agency Referral	Arson	Section B	0 to 1 per Arson Transaction	This transaction record contains information regarding any Agency Referrals.
1920	Arson Juvenile Subject	Arson	Section M	0 to many per Arson Transaction	This transaction record contains the information gathered on each Juvenile Subject as part of the Arson Module.

TABLE 3-7. Incident File Header Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1000
7	Transaction Type	C		1	
8	Fire Department Station	X		3	
9	NFIRS Version	F		2.2	*

* NFIRS Version – Refers to the version of NFIRS rules/edits used when generating this flat file. Initially the value for this field will be 5.0, but will change in the future as modifications and/or enhancements are made to the standard (e.g. 5.1).

TABLE 3-8. Basic Incident Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1005
7	Transaction Type	C		1	
8	Incident Type	C		3 or 4	
9	Address on Wildland Flag	Y		1	
10	Aid Given or Received	C		1 or 2	
11	Alarm Date and Time	N		12 or 14	
12	Arrival Date and Time	N		12 or 14	
13	Incident Controlled Date and Time	N		12 or 14	
14	Last Unit Cleared Date and Time	N		12 or 14	
15	Shift	X		1	
16	Alarms	X		2	
17	District	X		3	
18	Actions Taken	C		2 or 3	MC (Max of 3)
19	Resource Form Used Flag	Y		1	
20	Suppression Apparatus	N		4	
21	EMS Apparatus	N		4	

TABLE 3-8. Basic Incident Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
22	Other Apparatus	N		4	
23	Suppression Personnel	N		4	
24	EMS Personnel	N		4	
25	Other Personnel	N		4	
26	Resources Include Mutual Aid	Y		1	
27	Property Loss	N		9	
28	Contents Loss	N		9	
29	Property Value	N		9	
30	Contents Value	N		9	
31	Fire Service Deaths	N		3	
32	Other Deaths	N		3	
33	Fire Service Injuries	N		3	
34	Other Injuries	N		3	
35	Detector Alerted Occupants	C		1 or 2	
36	Hazardous Material Released	C		1 or 2	
37	Mixed Use	C		2 or 3	
38	Property Use	C		3 or 4	

TABLE 3-9. Incident Address Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1010
7	Transaction Type	C		1	
8	Census Tract	X		6	
9	Location Type	C		1	
10	Number or Milepost	X		8	
11	Street Prefix	C		2	
12	Street or Highway Name	X		30	
13	Street Type	C		4	
14	Street Suffix	C		2	
15	Apartment Number	X		15	
16	City	X		20	
17	State	C		2	

TABLE 3-9. Incident Address Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
18	Zip	N		5 or 9	
19	Cross Street or Directions	X		30	

TABLE 3-10. Aid Given or Received Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1020
7	Transaction Type	C		1	
8	FDID Receiving Aid	X		5	
9	FDID State Receiving Aid	C		2	
10	Incident Number of FDID Receiving Aid	N		7	

TABLE 3-11. Officer in Charge Authority Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1030
7	Transaction Type	C		1	
8	Authority Personnel ID	X		9	
9	Authority First Name	X		15	
10	Authority Middle Initial	X		1	
11	Authority Last Name	X		25	
12	Authority Rank	X		10	
13	Authority Assignment	X		10	
14	Authority Date	N		8	

TABLE 3-12. Member Making Report Authority Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1035
7	Transaction Type	C		1	
8	Authority Personnel ID	X		9	
9	Authority First Name	X		15	
10	Authority Middle Initial	X		1	
11	Authority Last Name	X		25	
12	Authority Rank	X		10	
13	Authority Assignment	X		10	
14	Authority Date	N		8	

TABLE 3-13. Incident Remarks Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1040
7	Transaction Type	C		1	
8	Remarks	X		Variable	

TABLE 3-14. Incident Person(s) Involved Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1050
7	Transaction Type	C		1	
8	Person Sequence Number	N		3	One Based
9	Name Prefix	X		3	
10	First Name	X		15	
11	Middle Initial	X		1	
12	Last Name	X		25	
13	Name Suffix	X		4	
14	Business Name	X		25	
15	Phone	N		10	
16	Street Number or Milepost	X		8	
17	Street Prefix	C		2	
18	Street or Highway Name	X		30	
19	Street Type	C		4	
20	Street Suffix	C		2	
21	Post Office Box	X		10	
22	Apartment	X		15	
23	City	X		20	
24	State	C		2	
25	Zip	N		5 or 9	

TABLE 3-15. Incident Owner Transactions (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1055
7	Transaction Type	C		1	

TABLE 3-15. Incident Owner Transactions (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
8	Name Prefix	X		3	
9	First Name	X		15	
10	Middle Initial	X		1	
11	Last Name	X		25	
12	Name Suffix	X		4	
13	Business Name	X		25	
14	Phone	N		10	
15	Street Number or Milepost	X		8	
16	Street Prefix	C		2	
17	Street or Highway Name	X		30	
18	Street Type	C		4	
19	Street Suffix	C		2	
20	Post Office Box	X		10	
21	Apartment	X		15	
22	City	X		20	
23	State	C		2	
24	Zip	N		5 or 9	

TABLE 3-16. Incident Special Study Transactions

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1060
7	Transaction Type	C		1	
8	Special Study Sequence Number	N		3	One based
9	Special Study Identification Number	N		5	*
10	Special Study Code	C		5	

* Special Study Identification Number – In order to support National, State and Local Special Studies, each special study will be assigned a unique identification number. This number must be included with the Special Study transaction record to identify which special study the code belongs. This also allows for validation of special study codes.

TABLE 3-17. Fire Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1100
7	Transaction Type	C		1	
8	Number of Residential Units	N		4	
9	Not Residential Flag	Y		1	
10	Number of Buildings Involved	N		3	
11	Acres Burned	N		6	
12	Less than one Acre	Y		1	
13	On Site Materials	C		3 or 4	MC (Max of 3)
14	Material Storage Use	C		1 or 2	MC *
15	Area of Origin	C		2 or 3	
16	Heat Source	C		2 or 3	
17	Item First Ignited	C		2 or 3	
18	Confined To Origin	C		1	
19	Type of Material	C		2 or 3	
20	Cause of Ignition	C		1 or 2	
21	Contributed To Ignition Factors	C		2 or 3	MC (Max of 2)
22	Human Factors	C		1 or 2	MC (Max of 7)
23	Age of Person	F		3.2	
24	Sex of Person	C		1	
25	Equipment Involved	C		3 or 4	
26	Mobile Property Involved	C		1 or 2	**
27	Suppression Factors	C		3 or 4	MC (Max of 3)

* - Material Storage Use corresponds directly to the On-Site Materials listed in Field #12. The first code in On-Site Material is associated with the first Material Storage Use, the second code is associated with the second Material Storage Use, etc. Each On-Site Materials listed should have a corresponding Material Storage Use. (i.e. If 2 On-Site Materials are listed, Material Storage Use should have 2 entries).

** - Mobile Property Involved Code refers to the coded information captured in Section H1 of the Fire Form. This includes 'None' responses.

TABLE 3-18. File Attached Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1110
7	Transaction Type	C		1	
8	Pre Fire Plan Available Flag	Y		1	
9	Reports Attached	C			MC (Max of 4)

TABLE 3-19. Fire Mobile Property Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1120
7	Transaction Type	C		1	
8	Mobile Property Type	C		2 or 3	
9	Mobile Property Make	C		2 or 3	
10	Mobile Property Model	X		25	
11	Mobile Property Year	N		4	4 digit year only
12	Mobile Property License Plate	X		10	
13	Mobile Property State	C		2	
14	Mobile Property VIN Number	X		17	

TABLE 3-20. Fire Equipment Involved Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		6	Record Type:1130
7	Transaction Type	C		1	
8	Equipment Brand	X		25	
9	Equipment Model	X		25	
10	Equipment Serial Number	X		25	
11	Equipment Year	N		4	4 digit year only
12	Equipment Power	C		2 or 3	
13	Equipment Portability	C		1 or 2	

TABLE 3-21. Structure Fire Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1200
7	Transaction Type	C		1	
8	Structure Type	C		1 or 2	
9	Structure Status	C		1 or 2	
10	Building Height: Stories Above Grade	N		3	
11	Building Height: Stories Below Grade	N		2	
12	Building Length	N		4	
13	Building Width	N		4	
14	Total Square Feet	N		8	
15	Fire Origin	N		3	+ or -
16	Fire Spread	C		1 or 2	
17	Number of Stories with Damage: Minor	N		3	
18	Number of Stories with Damage: Significant	N		3	
19	Number of Stories with Damage: Heavy	N		3	

TABLE 3-21. Structure Fire Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
20	Number of Stories with Damage: Extreme	N		3	
21	No Flame Spread/Same As First/Unknown	Y		1	
22	Item Contributing To Spread	C		2 or 3	
23	Type of Material Contributing To Spread	C		2 or 3	
24	Detector Presence	C		1 or 2	
25	Detector Type	C		1 or 2	
26	Detector Power	C		1 or 2	
27	Detector Operation	C		1 or 2	
28	Detector Effectiveness	C		1 or 2	
29	Detector Failure Reason	C		1 or 2	
30	AES Presence	C		1 or 2	
31	AES Type	C		1 or 2	
32	AES Operation	C		1 or 2	
33	Number of Sprinklers Operating	N		3	
34	AES Failure Reason	C		1 or 2	

TABLE 3-22. Wildland Fire Transaction (Sheet 1 of 3)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1300
7	Transaction Type	C		1	
8	Latitude	F		2.2	
9	Longitude	F		3.2	
10	Township	F		2.1	
11	North/South	C		1	
12	Range	N		3	
13	East/West	C		1	
14	Section	N		2	
15	Subsection	C		4	
16	Meridian	C		2	
17	Area Type	C		1 or 2	
18	Wildland Fire Cause	C		1 or 2	

TABLE 3-22. Wildland Fire Transaction (Sheet 2 of 3)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
19	Human Factors Contributing	C		1 or 2	MC (Max of 8)
20	Factors Contributing to Ignition Factors	C		2 or 3	MC (Max of 2)
21	Fire Suppression Factors	C		3 or 4	MC (Max of 3)
22	Heat Source	C		2 or 3	
23	Mobile Property Type	C		2 or 3	
24	Equipment Involved In Ignition	C		3 or 4	
25	NFDRS Weather Station ID	A		6	
26	Weather Type	C		2 or 3	
27	Wind Direction	C		1 or 2	
28	Wind Speed	N		3	
29	Air Temperature	N		3	+ or -
30	Relative Humidity	N		3	
31	Fuel Moisture	N		2	
32	Fire Danger Rating	C		1 or 2	
33	Number of Buildings Involved	N		3	
34	Number of Buildings Threatened	N		3	
35	Total Acres Burned	F		9.1	
36	Primary Crop Burned 1	X		25	
37	Primary Crop Burned 2	X		25	
38	Primary Crop Burned 3	X		25	
39	Undetermined Acres Burned %	N		3	
40	Tax Paying Acres Burned %	N		3	
41	Non-Tax Paying Acres Burned %	N		3	
42	City, town, village, local Acres Burned %	N		3	
43	County or parish Acres Burned %	N		3	
44	State or province Acres Burned %	N		3	
45	Federal Acres Burned %	N		3	
46	Foreign Acres Burned %	N		3	
47	Military Acres Burned %	N		3	
48	Other Acres Burned %	N		3	
49	Property Management Ownership	C		1 or 2	
50	Federal Agency Code	X		5	
51	NFDRS Fuel Model at Origin	C		2 or 3	
52	Person Responsible for Fire	C		1 or 2	
53	Gender	C		1	
54	Age	F		3.2	
55	Activity of Person	C		2 or 3	
56	Horizontal Distance from ROW	N		2	
57	Type of ROW	C		3 or 4	

TABLE 3-22. Wildland Fire Transaction (Sheet 3 of 3)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
58	Elevation	N		5	
59	Relative Position on Slope	C		1 or 2	
60	Aspect	C		1 or 2	
61	Flame Length	N		2	
62	Rate of Spread	N		3	

TABLE 3-23. Civilian Fire Casualty Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1400
7	Transaction Type	C		1	
8	Civilian Fire Casualty Sequence Number	N		3	One Based
9	First Name	X		15	
10	Middle Initial	X		1	
11	Last Name	X		25	
12	Name Suffix	X		3	
13	Gender	C		1	
14	Age	F		3.2	
15	Race	C		1 or 2	
16	Ethnicity	C		1 or 2	
17	Affiliation	C		1 or 2	
18	Injury Date and Time	N		8 or 14	
19	Severity	C		1 or 2	
20	Cause of Injury	C		1 or 2	
21	Human Factors	C		1 or 2	MC (Max of 8)
22	Contributing Factors	C		2 or 3	MC (Max of 3)
23	Activity When Injured	C		1 or 2	
24	Location At Time of Incident	C		1 or 2	
25	General Location At Time of Injury	C		1 or 2	
26	Story At Start of Incident	N		3	+ or -
27	Story When Injury Occurred	N		3	+ or -
28	Specific Location at Time of Injury	C		2 or 3	
29	Primary Apparent Symptom	C		2 or 3	

TABLE 3-23. Civilian Fire Casualty Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
30	Primary Part of Body Injured	C		1 or 2	
31	Disposition	C		1 or 2	

TABLE 3-24. Fire Service Casualty Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1500
7	Transaction Type	C		1	
8	Fire Service Casualty Sequence Number	N		3	One Based
9	Firefighter Identification Number	X		9	
10	First Name	X		15	
11	Middle Initial	X		1	
12	Last Name	X		25	
13	Name Suffix	X		3	
14	Gender	C		1	
15	Career	C		1 or 2	
16	Age	N		3	
17	Injury Date and Time	N		12 or 14	
18	Responses	N		2	
19	Usual Assignment	C		1 or 2	
20	Physical Condition	C		1 or 2	
21	Severity	C		1 or 2	
22	Taken To	C		1 or 2	
23	Activity At Time of Injury	C		2 or 3	
24	Primary Apparent Symptom	C		2 or 3	
25	Primary Area of Body Injured	C		2 or 3	
26	Cause of Firefighter Injury	C		1 or 2	
27	Factor Contributing to Injury	C		2 or 3	
28	Object Involved In Injury	C		2 or 3	
29	Where Injury Occurred	C		1 or 2	
30	Injury Relation to Structure	C		1 or 2	
31	Story of Injury	N		3	+ or -

TABLE 3-24. Fire Service Casualty Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
32	Specific Location	C		2 or 3	
33	Vehicle Type	C		1 or 2	
34	Protective Equipment Contributed to Injury	C		1 or 2	

TABLE 3-25. Fire Service Equipment Failure Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1510
7	Transaction Type	C		1	
8	Fire Service Casualty Sequence Number	N		3	One Based
9	Equipment Failure Sequence Number	N		3	One Based
10	Equipment Item	C		2 or 3	
11	Equipment Problem	C		2 or 3	
12	Equipment Manufacturer	X		12	
13	Equipment Model	X		12	
14	Equipment Serial Number	X		12	

TABLE 3-26. EMS Patient Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	

The number of Injury Types codes supplied must correspond directly to the number of Body Sites Injured in Field #18.

Example: If 3 Body Site of Injury were supplied, a maximum of 3 Injury Types are allowed.

The Injury Type responses must be listed in the exact same order as the Body Sites to which they correspond.

Example: Given the Body Sites and Injury Types listed below, the transaction should look as follows. (Please note the codes are not real codes, but for illustrative purposes only)

Sequence	Body Site	Injury Type
#1	1	A
#2	2	B
#3	3	C

Transaction Record: (Prior Fields)^1;2;3;^A;B;C;^(Subsequent Fields)

TABLE 3-26. EMS Patient Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1600
7	Transaction Type	C		1	
8	EMS Patient Sequence Number	N		3	One Based
9	Arrived At Patient Date and Time	N		12 or 14	
10	Patient Transfer Date and Time	N		12 or 14	
11	Provider Impression / Assessment	C		2 or 3	
12	Age	F		3.2	
13	Gender	C		1	
14	Race	C		1 or 2	
15	Ethnicity	C		1 or 2	
16	Human Factors	C		1 or 2	MC (Max of 8)
17	Other Factors	C		1 or 2	
18	Body Sites of Injury	C		1 or 2	MC (Max of 5)
19	Injury Types	C		2 or 3	MC (See Below)
20	Cause of Illness/Injury	C		2 or 3	
21	Procedures Used	C		2 or 3	MC (Max of 25)
22	Safety Equipment Used	C		1 or 2	MC (Max of 8)
23	Pre or Post Arrival Arrest	C		1 or 2	MC (Max of 2)
24	Pre-Arrival Arrest Descriptors	C		1 or 2	MC (Max of 2)
25	Initial Arrest Rhythm	C		1 or 2	
26	Initial Level of Care	C		1 or 2	
27	Highest Level of Care	C		1 or 2	
28	Patient Status	C		1 or 2	
29	Pulse on Transfer	C		1 or 2	
30	Disposition	C		1 or 2	

The number of Injury Types codes supplied must correspond directly to the number of Body Sites Injured in Field #18.

Example: If 3 Body Site of Injury were supplied, a maximum of 3 Injury Types are allowed.

The Injury Type responses must be listed in the exact same order as the Body Sites to which they correspond.

Example: Given the Body Sites and Injury Types listed below, the transaction should look as follows. (Please note the codes are not real codes, but for illustrative purposes only)

Sequence	Body Site	Injury Type
#1	1	A
#2	2	B
#3	3	C

Transaction Record: (Prior Fields)^1;2;3;^A;B;C;^(Subsequent Fields)

TABLE 3-27. Hazardous Material Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1700
7	Transaction Type	C		1	
8	Released From	C		1 or 2	
9	Story of Release	N		3	+ or -
10	Population Density	C		1 or 2	
11	Area Affected Measurement	N		4	
12	Area Affected Units	C		1 or 2	
13	Area Evacuated Measurement	N		4	
14	Area Evacuated Units	C		1 or 2	
15	Estimated Number of People Evacuated	N		6	
16	Estimated Number of Buildings Evacuated	N		4	
17	HazMat Actions Taken	C		2 or 3	MC (Max of 3)
18	Occurred First	C		1 or 2	
19	Cause of Release	C		1 or 2	
20	Factors Contributing To Release	C		2 or 3	MC (Max of 3)
21	Mitigating Factors	C		2 or 3	MC (Max of 3)
22	Equipment Involved in Release	C		3 or 4	
23	Disposition	C		1 or 2	
24	HazMat Civilian Deaths	N		4	
25	HazMat Civilian Injuries	N		4	

TABLE 3-28. Hazardous Material Chemical Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1710
7	Transaction Type	C		1	
8	HazMat Chemical Sequence Number	N		2	One Based

TABLE 3-28. Hazardous Material Chemical Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
9	UN Number	X		4	
10	DOT Hazard Classification	C		2 or 3	
11	CAS Registration	X		10	
12	Chemical Name	X		50	
13	Container Type	C		2 or 3	
14	Estimated Container Capacity	N		9	
15	Capacity Units	C		2 or 3	
16	Estimated Amount Released	N		9	
17	Released Units	C		2 or 3	
18	Physical State When Released	C		1 or 2	
19	Released Into	C		1 or 2	

TABLE 3-29. Hazardous Material Mobile Property Type

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1720
7	Transaction Type	C		1	
8	Mobile Property Type	C		2 or 3	
9	Mobile Property Make	C		2 or 3	
10	Mobile Property Model	X		25	
11	Mobile Property Year	N		4	4 digit year only
12	Mobile Property License Plate	X		10	
13	Mobile Property State	C		2	
14	Mobile Property DOT/ICC Number	X		17	

TABLE 3-30. Hazardous Material Equipment Involved Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1730
7	Transaction Type	C		1	
8	Equipment Brand	X		25	
9	Equipment Model	X		25	
10	Equipment Serial Number	X		25	
11	Equipment Year	N		4	4 digit year only

TABLE 3-31. Incident Apparatus Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1800
7	Transaction Type	C		1	
8	Apparatus Sequence Number	N		3	One Based
9	Apparatus ID	X		5	
10	Apparatus Type	C		2 or 3	
11	Apparatus Dispatch Date and Time	N		12 or 14	
12	Apparatus Arrival Date and Time	N		12 or 14	
13	Apparatus Clear Date and Time	N		12 or 14	
14	Number of People	N		3	
15	Apparatus Use	C		1 or 2	
16	Apparatus Actions Taken	C		2 or 3	MC (Max of 4)

TABLE 3-32. Incident Personnel Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1810
7	Transaction Type	C		1	
8	Apparatus Sequence Number	N		3	One Based
9	Personnel Sequence Number	N		3	One Based
10	Personnel ID	X		9	
11	First Name	X		15	
12	Middle Initial	X		1	
13	Last Name	X		25	
14	Rank	X		6	
15	Personnel Actions Taken	C		2 or 3	MC (Max of 4)

TABLE 3-33. Arson Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1900
7	Transaction Type	C		1	
8	Case Status	C		1 or 2	
9	Availability of Material First Ignited	C		1 or 2	
10	Suspected Motivation Factors	C		2 or 3	MC (Max of 3)
11	Apparent Group Involvement	C		1 or 2	MC (Max of 3)
12	Entry Method	C		2 or 3	
13	Extent of Fire Involvement on Arrival	C		1 or 2	
14	Incendiary Devices: Container	C		2 or 3	
15	Incendiary Devices: Ignition/Delay Device	C		2 or 3	
16	Incendiary Devices: Fuel	C		2 or 3	
17	Other Investigative Information	C		1 or 2	MC (Max of 8)

TABLE 3-33. Arson Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
18	Property Ownership	C		1 or 2	
19	Initial Observations	C		1 or 2	MC (Max of 8)
20	Laboratory Used	C		1 or 2	MC (Max of 6)

TABLE 3-34. Arson Agency Referral Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1910
7	Transaction Type	C		1	
8	Agency Name	X		30	
9	Agency Street Number	X		8	
10	Agency Street Prefix	C		2	
11	Agency Street or Highway	X		30	
12	Agency Street Type	C		4	
13	Agency Street Suffix	C		2	
14	Agency Apartment Number	X		15	
15	Agency City	X		20	
16	Agency State	C		2	
17	Agency ZIP Code	N		5 or 9	
18	Agency Phone Number	N		10	
19	Agency Case Number	X		12	
20	Agency ORI	X		5	
21	Agency FID	X		2	
22	Agency FDID	X		5	

TABLE 3-35. Arson Juvenile Subject Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1920
7	Transaction Type	C		1	
8	Subject Sequence Number	N		3	One Based
9	Age	N		3	
10	Gender	C		1 or 2	
11	Race	C		1 or 2	
12	Ethnicity	C		1 or 2	
13	Family Type	C		1 or 2	
14	Motivation/Risk Factors	C		1 or 2	MC (Max of 8)
15	Disposition	C		1 or 2	

TABLE 3-36. Index of Transactions

Trans ID	Transaction	Form	Section	Number Record Expected	Comments
2000	Fire Department Header	NA	NA	1 per Fire Department	This transaction record contains all the National information pertaining to a single Fire Department.
2010	Fire Department Personnel	NA	NA	0 to many per Fire Department	These transaction records contain Personnel information about firefighters for a particular fire department.
2020	Fire Department Apparatus	NA	NA	0 to many per Fire Department	These transaction records contain Apparatus information for apparatus located at a particular fire department.

The Fire Department Transactions records are provided for the transmission of specific fire department information. These records, when transmitted, need to be contained in a separate flat file (i.e. – They can not be transmitted as part of the incident flat file).

TABLE 3-37. Fire Department Header Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Record Type	N		5	Record Type:2000
4	Transaction Type	C		1	
5	Fire Department Name	X		30	
6	Fire Department Street Number of Milepost	X		8	
7	Fire Department Street Prefix	C		2	
8	Fire Department Street or Highway Name	X		30	
9	Fire Department Street Type	C		4	
10	Fire Department Street Suffix	C		2	
11	Fire Department City	X		20	
12	Fire Department Zip	N		9	
13	Fire Department Phone	N		10	
14	Fire Department Fax	N		10	
15	Fire Department E-mail	X		45	
16	Fire Department FIPS County Code	X		3	
17	Number of Stations	N		3	
18	Number of Paid Firefighters	N		4	
19	Number of Volunteer Firefighters	N		4	
20	Number of Volunteer Paid Per Call	N		4	

TABLE 3-38. Fire Department Personnel Transaction (Sheet 1 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Record Type	N		5	Record Type:2010
4	Transaction Type	C		1	
5	Firefighter Sequence Number	N		3	One Based
6	Firefighter Personnel ID	X		9	
7	Firefighter First Name	X		15	
8	Firefighter Middle Initial	X		1	
9	Firefighter Last Name	X		25	
10	Firefighter Name Suffix	X		3	
11	Firefighter Rank	X		10	
12	Firefighter Personal Phone 1	N		10	

TABLE 3-38. Fire Department Personnel Transaction (Sheet 2 of 2)

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
13	Firefighter Personal Phone 2	N		10	
14	Firefighter Personal E-Mail	X		45	

TABLE 3-39. Fire Department Apparatus Transaction

Element Number	Element Name	Data Type	Special Formatting	Max or Expected Length	Comments
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Record Type	N		5	Record Type:2020
4	Transaction Type	C		1	
5	Apparatus Sequence Number	N		3	One Based
6	Apparatus ID	X		5	
7	Apparatus Type	X		2 or 3	
8	Apparatus Name	X		25	
9	Apparatus First In Service Date	N		8	

Data Dictionary

The NFIRS 5.0 data dictionary codes that follow contain a shorter version of the code descriptors for the NFIRS 5.0 specification. These descriptors are a maximum of fifty (50) characters in length and are intended for use in automated NFIRS 5.0 data collection systems. The full length code descriptors are available in the NFIRS 5.0 Reference Guide available from the United States Fire Administration.

Important Note For Developers:

Certain codes in the data dictionary are designated as conversion only codes in the following manner:

Code #	Code Descriptor (conversion only)
--------	--

Codes that are identified in this manner are used solely to store data converted from the NFIRS 4.1 format and are never used for the collection of data in NFIRS 5.0. Under no circumstances should these codes ever be included in automated data entry systems' code look-ups, pick-lists or code tables. Including the "conversion only" codes in such a manner will result in a failure to successfully complete NFIRS 5.0 software certification.

Also note that in some cases the **(conversion only)** designation at the end of codes may make the total descriptor length exceed 50 characters. Since these codes are not to be used to collect data, this should not have an impact on the descriptor field size.

Tables for all of the data dictionaries can be obtained on the USFA Web site at:

<http://www.usfa.fema.gov/newnfirs/>

Basic Module Data Dictionary

Location Type - Section B

1	Street Address
2	Intersection
3	In front of
4	Rear of
5	Adjacent to
6	Directions

Street Prefix or Street Suffix - Section B

E	East
N	North
S	South
W	West
NE	Northeast
NW	Northwest
SE	Southeast
SW	Southwest

Street Type - Section B

ALY	Alley
ANX	Annex
ARC	Arcade
AVE	Avenue
BCH	Beach
BND	Bend
BLF	Bluff
BLFS	Bluffs
BTM	Bottom
BLVD	Boulevard
BR	Branch
BRG	Bridge
BRK	Brook
BRKS	Brooks
BG	Burg
BGS	Burges
BYP	Bypass
CP	Camp
CYN	Canyon
CPE	Cape
CSWY	Causeway
CTR	Center

CTRS	Centers
CIR	Circle
CIRS	Circles
CLF	Cliff
CLFS	Cliffs
CLB	Club
CMN	Common
CMNS	Commons
COR	Corner
CORS	Corners
CT	Court
CTS	Courts
CV	Cove
CVS	Coves
CRK	Creek
CRES	Crescent
CRST	Crest
XING	Crossing
XRD	Crossroad
XRDS	Crossroads
CURV	Curve
DL	Dale
DM	Dam
DV	Divide
DR	Drive
DRS	Drives
EST	Estate
ESTS	Estates
EXPY	Expressway
EXT	Extension
EXTS	Extensions
FALL	Fall
FLS	Falls
FRY	Ferry
FLD	Field
FLDS	Fields
FLT	Flat
FLTS	Flats
FRD	Ford
FRDS	Fords
FRST	Forest
FRG	Forge
FRGS	Forges

Street Type - Section B (continued)

FRK Fork
FRKS Forks
FT Fort
FWY Freeway
GDN Garden
GDNS Gardens
GTWY Gateway
GLN Glen
GLNS Glens
GRN Green
GRNS Greens
GRV Grove
GRVS Groves
HBR Harbor
HBRH Harbors
HVN Haven
HTS Heights
HWY Highway
HL Hill
HLS Hills
HOLW Hollow
INLT Inlet
IS Island
ISS Islands
ISLE Isle
JCT Junction
JCTS Junctions
KY Key
KYS Keys
KNL Knoll
KNLS Knolls
LK Lake
LKS Lakes
LNDG Landing
LN Lane
LGT Light
LGTS Lights
LF Loaf
LCK Lock
LCKS Locks
LDG Lodge
LOOP Loop

MALL Mall
MNR Manor
MNRH Manors
MDW Meadow
MDWS Meadows
MEWS Mews
ML Mill
MLS Mills
MSN Mission
MTWY Motorway
MT Mount
MTN Mountain
MTNS Mountains
NCK Neck
ORCH Orchard
OVAL Oval
PARK Park
PARKS Parks
PKY Parkway
PKYS Parkways
PASS Pass
PSGE Passage
PATH Path
PIKE Pike
PNE Pine
PNES Pines
PL Place
PLZ Plaza
PT Point
PTS Points
PRT Port
PRTS Ports
PR Prairie
RADL Radial
RAMP Ramp
RNCH Ranch
RPD Rapid
RPDS Rapids
RST Rest
RDG Ridge
RDGS Ridges
RIV River
RD Road

Street Type - Section B (continued)

RDS	Roads
RT	Route
ROW	Row
RUE	Rue
RUN	Run
SHL	Shoal
SHLS	Shoals
SHR	Shore
SHRS	Shores
SKWY	Skyway
SPG	Spring
SPGS	Springs
SPUR	Spur
SPURSS	Spurs
SQ	Square
SQS	Squares
STA	Station
STRA	Stravenue
STRM	Stream
ST	Street
STS	Streets
SMT	Summit
TER	Terrace
TRWY	Throughway
TRCE	Trace
TRAK	Track
TRFY	Trafficway
TRL	Trail
TRLR	Trailer
TUNL	Tunnel
TPKE	Turnpike
UPAS	Underpass
UN	Union
UNS	Unions
VLY	Valley
VLYS	Valleys
VIA	Viaduct
VW	View
VWS	Views
VLG	Village
VLGS	Villages
VL	Ville

VIS	Vista
WALK	Walk
WALK	Walks
WALL	Wall
WAY	Way
WAYS	Ways
WL	Well
WLS	Wells

State, U. S. Territory Abbreviations - Section B

AL	Alabama
AK	Alaska
AZ	Arizona
AR	Arkansas
CA	California
CO	Colorado
CT	Connecticut
DE	Delaware
DC	District of Columbia
FL	Florida
GA	Georgia
HI	Hawaii
ID	Idaho
IL	Illinois
IN	Indiana
IA	Iowa
KS	Kansas
KY	Kentucky
LA	Louisiana
ME	Maine
MD	Maryland
MA	Massachusetts
MI	Michigan
MN	Minnesota
MS	Mississippi
MO	Missouri
MT	Montana
NE	Nebraska
NV	Nevada
NH	New Hampshire
NJ	New Jersey
NM	New Mexico

State, U. S. Territory Abbreviations - Section B (continued)

NY	New York
NC	North Carolina
ND	North Dakota
OH	Ohio
OK	Oklahoma
OR	Oregon
PA	Pennsylvania
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TN	Tennessee
TX	Texas
UT	Utah
VT	Vermont
VA	Virginia
WA	Washington
WV	West Virginia
WI	Wisconsin
WY	Wyoming
AS	American Samoa
CZ	Canal Zone
DD	Department of Defense
GU	Guam
FM	Federated States of Micronesia
MH	Marshall Islands
MP	Northern Mariana Islands
PW	Palau
PR	Puerto Rico
UM	US Minor Outlying Islands
VI	Virgin Islands
OO	Other

Incident Type - Section C***1 Fire******10 Fire, other***

100 Fire, other

11 Structure Fire

110 Structure fire, other (Conversion only)

111 Building fire

112 Fires in structures other than in a building

113 Cooking fire, confined to container

114 Chimney or flue fire, confined to chimney or flue

115 Incinerator overload or malfunction, fire confined

116 Fuel burner/boiler malfunction, fire confined

117 Commercial Compactor fire, confined to rubbish

118 Trash or rubbish fire, contained

12 Fire in mobile property used as a fixed structure

120 Fire in mobile property used as a fixed structure, other

121 Fire in mobile home used as fixed residence

122 Fire in motor home, camper, recreational vehicle

123 Fire in portable building, fixed location

13 Mobile property (vehicle) fire

130 Mobile property (vehicle) fire, other

131 Passenger vehicle fire

132 Road freight or transport vehicle fire

133 Rail vehicle fire

134 Water vehicle fire

135 Aircraft fire

136 Self-propelled motor home or recreational vehicle

137 Camper or recreational vehicle (RV) fire

138 Off-road vehicle or heavy equipment fire

14 Natural vegetation fire

140 Natural vegetation fire, other

141 Forest, woods or wildland fire

142 Brush, or brush and grass mixture fire

143 Grass fire

15 Outside rubbish fire

150 Outside rubbish fire, other

151 Outside rubbish, trash or waste fire

152 Garbage dump or sanitary landfill fire

153 Construction or demolition landfill fire

154 Dumpster or other outside trash receptacle fire

155 Outside stationary compactor/compacted trash fire

16 Special outside fire

160 Special outside fire, other

161 Outside storage fire

162 Outside equipment fire

163 Outside gas or vapor combustion explosion

164 Outside mailbox fire

17 Cultivated vegetation, crop fire

170 Cultivated vegetation, crop fire, other

171 Cultivated grain or crop fire

172 Cultivated orchard or vineyard fire

173 Cultivated trees or nursery stock fire

Incident Type - Section C (continued)

2	<i>Overpressure rupture, explosion, overhear -no fire</i>	352	Extrication of victim(s) from vehicle
20	<i>Overpressure rupture, explosion, overhear, other</i>	353	Removal of victim(s) from stalled elevator
200	Overpressure rupture, explosion, overhear other	354	Trench/below grade rescue
21	<i>Overpressure rupture from steam (no ensuing fire)</i>	355	Confined space rescue
210	Overpressure rupture from steam, other	356	High angle rescue
211	Overpressure rupture of steam pipe or pipeline	357	Extrication of victim(s) from machinery
212	Overpressure rupture of steam boiler	36	<i>Water or ice-related rescue</i>
213	Steam rupture of pressure or process vessel	360	Water & ice related rescue, other
22	<i>Overpressure rupture from air or gas - no fire</i>	361	Swimming/recreational water areas rescue
220	Overpressure rupture from air or gas, other	362	Ice rescue
221	Overpressure rupture of air or gas pipe/pipeline	363	Swift water rescue
222	Overpressure rupture of boiler from air or gas	364	Surf rescue
223	Air or gas rupture of pressure or process vessel	365	Watercraft rescue
23	<i>Overpressure rupture, chemical reaction - no fire</i>	37	<i>Electrical rescue</i>
231	Chemical reaction rupture of process vessel	370	Electrical rescue, other
24	<i>Explosion (no fire)</i>	371	Electrocution or potential electrocution
240	Explosion (no fire), other	372	Trapped by power lines
241	Munitions or bomb explosion (no fire)	38	<i>Rescue or EMS standby</i>
242	Blasting agent explosion (no fire)	381	Rescue or EMS standby
243	Fireworks explosion (no fire)	4	<i>Hazardous Conditions (No fire)</i>
25	<i>Excessive heat, scorch burns with no ignition</i>	40	<i>Hazardous condition, other</i>
251	Excessive heat, scorch burns with no ignition	41	<i>Combustible/flammable spills & leaks</i>
3	<i>Rescue & Emergency Medical Service Incidents</i>	410	Flammable gas or liquid condition, other
30	<i>Rescue, emergency medical call (EMS), other</i>	411	Gasoline or other flammable liquid spill
300	Rescue, emergency medical call (EMS) call, other	412	Gas leak (natural gas or LPG)
31	<i>Medical assist</i>	413	Oil or other combustible liquid spill
311	Medical assist, assist EMS crew	42	<i>Chemical release, reaction, or toxic condition</i>
32	<i>Emergency medical service (EMS)</i>	420	Toxic condition, other
320	Emergency medical service, other (Conversion only)	421	Chemical hazard (no spill or leak)
321	EMS call, excluding vehicle accident with injury	422	Chemical spill or leak
322	Vehicle accident with injuries	423	Refrigeration leak
323	Motor vehicle/pedestrian accident (MV Ped)	424	Carbon monoxide incident
33	<i>Lock-In</i>	43	<i>Radioactive condition</i>
331	Lock-in (if lock out, use 511)	430	Radioactive condition, other
34	<i>Search for lost person</i>	431	Radiation leak, radioactive material
340	Search, other	44	<i>Electrical wiring/equipment problem</i>
341	Search for person on land	440	Electrical wiring/equipment problem, other
342	Search for person in water	441	Heat from short circuit (wiring), defective/worn
343	Search for person underground	442	Overheated motor
35	<i>Extrication, rescue</i>	443	Light ballast breakdown
350	Extrication, rescue, other	444	Power line down
351	Extrication of victim(s) from building/structure	445	Arcing, shorted electrical equipment

Incident Type - Section C (continued)**45 Biological hazard**

451 Biological hazard, confirmed or suspected

46 Accident, potential accident

460 Accident, potential accident, other

461 Building or structure weakened or collapsed

462 Aircraft standby

463 Vehicle accident, general cleanup

47 Explosive, bomb removal

471 Explosive, bomb removal (for bomb scare, use 721)

48 Attempted burning, illegal action

480 Attempted burning, illegal action, other

481 Attempt to burn

482 Threat to burn

5 Service Call**50 Service call, other**

500 Service Call, other

51 Person in distress

510 Person in distress, other

511 Lock-out

512 Ring or jewelry removal

52 Water problem

520 Water problem, other

521 Water evacuation

522 Water or steam leak

53 Smoke, odor problem

531 Smoke or odor removal

54 Animal problem or rescue

540 Animal problem, other

541 Animal problem

542 Animal rescue

55 Public service assistance

550 Public service assistance, other

551 Assist police or other governmental agency

552 Police matter

553 Public service

554 Assist invalid

555 Defective elevator, no occupants

56 Unauthorized burning

561 Unauthorized burning

57 Cover assignment, standby at fire station, move-up

571 Cover assignment, standby, moveup

6 Good Intent Call**60 Good intent call, other**

600 Good intent call, other

61 Dispatched and canceled enroute

611 Dispatched & canceled en route

62 Wrong location

621 Wrong location

63 Controlled burning

631 Authorized controlled burning

632 Prescribed fire

64 Vicinity alarm

641 Vicinity alarm (incident in other location)

65 Steam, other gas mistaken for smoke

650 Steam, other gas mistaken for smoke, other

651 Smoke scare, odor of smoke

652 Steam, vapor, fog or dust thought to be smoke

653 Barbecue, tar kettle

66 EMS call where party has been transported

661 EMS call, party transported by non-fire agency

67 Hazmat release investigation w/ no hazmat

671 Hazmat release investigation w/ no hazmat

672 Biological hazard investigation, none found

7 False Alarm & False Call**70 False alarm and false call, other**

700 False alarm or false call, other

71 Malicious, mischievous false alarm

710 Malicious, mischievous false call, other

711 Municipal alarm system, malicious false alarm

712 Direct tie to FD, malicious/false alarm

713 Telephone, malicious false alarm

714 Central station, malicious false alarm

715 Local alarm system, malicious false alarm

72 Bomb scare

721 Bomb scare - no bomb

73 System or detector malfunction

730 System malfunction, other

731 Sprinkler activation due to malfunction

732 Extinguishing system activation due to malfunction

733 Smoke detector activation due to malfunction

734 Heat detector activation due to malfunction

735 Alarm system sounded due to malfunction

736 CO detector activation due to malfunction

74 Unintentional system/detector operation - no fire

740 Unintentional transmission of alarm, other

- 741 Sprinkler activation, no fire - unintentional
- 742 Extinguishing system activation
- 743 Smoke detector activation, no fire - unintentional

Incident Type - Section C (continued)

- 744 Detector activation, no fire - unintentional
- 745 Alarm system sounded, no fire - unintentional
- 746 Carbon monoxide detector activation, no CO

75 Biohazard scare

- 751 Biological hazard, malicious false report

8 Severe Weather & Natural Disaster

- 800 Severe weather or natural disaster, other
- 811 Earthquake assessment
- 812 Flood assessment
- 813 Wind storm, tornado/hurricane assessment
- 814 Lightning strike (no fire)
- 815 Severe weather or natural disaster standby

9 Special Incident Type**90 Special type of incident**

- 900 Special type of incident, other

91 Citizen complaint

- 911 Citizen complaint

- UUU Undetermined incident type (Conversion only)

Aid Given or Received - Section D

- 1 Mutual aid received
- 2 Automatic aid received
- 3 Mutual aid given
- 4 Automatic aid given
- 5 Other aid given
- N None

Actions Taken - Section F**1 Fire**

- 10 Fire, other
- 11 Extinguish
- 12 Salvage & overhaul
- 13 Establish fire lines (wildfire)
- 14 Contain fire (wildland)
- 15 Confine fire (wildland)
- 16 Control fire (wildland)
- 17 Manage prescribed fire (wildland)

2 Search & Rescue

- 20 Search & rescue, other

- 21 Search
- 22 Rescue, remove from harm
- 23 Extricate, disentangle
- 24 Recover body

3 EMS & Transport

- 30 Emergency medical services, other
- 31 Provide first aid & check for injuries
- 32 Provide basic life support (BLS)
- 33 Provide advanced life support (ALS)
- 34 Transport person

4 Hazardous Condition

- 40 Hazardous condition, other
- 41 Identify, analyze hazardous materials
- 42 Hazmat detection, monitoring, sampling, & analysis
- 43 Hazardous materials spill control and confinement
- 44 Hazardous materials leak control & containment
- 45 Remove hazard
- 46 Decontaminate persons or equipment
- 47 Decontaminate occupancy or area
- 48 Remove hazardous materials

5 Fires, Rescues & Hazardous Conditions

- 50 Fires, rescues & hazardous conditions, other
- 51 Ventilate
- 52 Forcible entry
- 53 Evacuate area
- 54 Determine if materials are non-hazardous
- 55 Establish safe area
- 56 Provide air supply
- 57 Provide light or electrical power
- 58 Operate apparatus or vehicle

6 Systems & Services

- 60 Systems and services, other
- 61 Restore municipal services
- 62 Restore sprinkler or fire protection system
- 63 Restore fire alarm system
- 64 Shut down system
- 65 Secure property
- 66 Remove water

7 Assistance

- 70 Assistance, other
- 71 Assist physically disabled
- 72 Assist animal
- 73 Provide manpower

Actions Taken - Section F (continued)

74	Provide apparatus
75	Provide equipment
76	Provide water
77	Control crowd
78	Control traffic
79	Assess severe weather or natural disaster damage
8	<i>Information, Investigation & Enforcement</i>
80	Information, investigation & enforcement, other
81	Incident command
82	Notify other agencies.
83	Provide information to public or media
84	Refer to proper authority
85	Enforce code
86	Investigate
9	<i>Fill-in, Standby</i>
90	Fill-in, standby, other
91	Fill-in or moveup
92	Standby
93	Cancelled enroute
00	Action taken, other
UU	Undetermined (Conversion only)

Detector

1	Detector alerted occupants
2	Detector did not alert occupants
U	Unknown

Hazardous Materials Release - Section H3

1	Natural gas - slow leak, no evacuation or HazMat actions
2	Propane gas - Less than a 21 lb. tank
3	Gasoline - vehicle fuel tank or portable container
4	Kerosene - fuel burning equipment/portable storage
5	Diesel fuel/fuel oil - vehicle fuel tank/portable
6	Household/office solvent or chemical spill
7	Motor oil - from engine or portable container
8	Paint - spills less than 55 gallons
0	Special hazmat actions required or spill \geq 55 gal.
N	None

Mixed Use Property - Section I

10	Assembly use
20	Educational use

33	Medical use
40	Residential use
51	Row of stores
53	Enclosed mall
58	Business and residential use
59	Office use
60	Industrial use
63	Military use
65	Farm use
00	Mixed use, other
NN	Not mixed use

Property Use - Section J***0 Property Use, Other******1 Assembly***

100	Assembly, other
110	Fixed use recreation places, other
111	Bowling alley
112	Billiard center, pool hall
113	Electronic amusement center
114	Ice rink: indoor, outdoor
115	Roller rink: indoor or outdoor
116	Swimming facility: indoor or outdoor
120	Variable use amusement, recreation places
121	Ballroom, gymnasium
122	Convention center, exhibition hall
123	Stadium, arena
124	Playground
129	Amusement center: indoor/outdoor
130	Places of worship, funeral parlors
131	Church, mosque, synagogue, temple, chapel
134	Funeral parlor
140	Clubs, other
141	Athletic/health club
142	Clubhouse
143	Yacht Club
144	Casino, gambling clubs
150	Public or government, other
151	Library
152	Museum
154	Memorial structure, including monuments & statues
155	Courthouse
160	Eating, drinking places

Property Use - Section J (continued)

161	Restaurant or cafeteria
162	Bar or nightclub
170	Passenger terminal, other
171	Airport passenger terminal
173	Bus station
174	Rapid transit station
180	Studio/theater, other
181	Live performance theater
182	Auditorium or concert hall
183	Movie theater
185	Radio, television studio
186	Film/movie production studio
2	<i>Educational</i>
200	Educational, other
210	Schools, non-adult
211	Preschool
213	Elementary school, including kindergarten
215	High school/junior high school/middle school
241	Adult education center, college classroom
254	Day care, in commercial property
255	Day care, in residence, licensed
256	Day care in residence, unlicensed.
3	<i>Health Care, Detention & Correction</i>
300	Health care, detention, & correction, other
311	24-hour care Nursing homes, 4 or more persons
321	Mental retardation/development disability facility
322	Alcohol or substance abuse recovery center
323	Asylum, mental institution
331	Hospital - medical or psychiatric
332	Hospices
340	Clinics, Doctors offices, hemodialysis centers
341	Clinic, clinic-type infirmary
342	Doctor, dentist or oral surgeon's office
343	Hemodialysis unit
361	Jail, prison (not juvenile)
363	Reformatory, juvenile detention center
365	Police station
4	<i>Residential</i>
400	Residential, other
419	1 or 2 family dwelling
429	Multifamily dwellings
439	Boarding/rooming house, residential hotels

449	Hotel/motel, commercial
459	Residential board and care
460	Dormitory type residence, other
462	Sorority house, fraternity house
464	Barracks, dormitory
5	<i>Mercantile, Business</i>
500	Mercantile, business, other
511	Convenience store
519	Food and beverage sales, grocery store
529	Textile, wearing apparel sales
539	Household goods, sales, repairs
549	Specialty shop
557	Personal service, including barber & beauty shops
559	Recreational, hobby, home repair sales, pet store
564	Laundry, dry cleaning
569	Professional supplies, services
571	Service station, gas station
579	Motor vehicle or boat sales, services, repair
580	General retail, other
581	Department or discount store
592	Bank
593	Office: veterinary or research
596	Post office or mailing firms
599	Business office
6	<i>Industrial, Utility, Defense, Agriculture, Mining</i>
600	Utility, defense, agriculture, mining, other
610	Energy production plant, other
614	Steam or heat generating plant
615	Electric generating plant
629	Laboratory or science laboratory
631	Defense, military installation
635	Computer center
639	Communications center
640	Utility or Distribution system, other
642	Electrical distribution
644	Gas distribution, pipeline, gas distribution
645	Flammable liquid distribution, pipeline, flammable
647	Water utility
648	Sanitation utility
655	Crops or orchard
659	Livestock production
669	Forest, timberland, woodland
679	Mine or quarry

Property Use - Section J (continued)**7 *Manufacturing, Processing***

700 Manufacturing, processing

8 *Storage*

800 Storage, other

807 Outside material storage area

808 Outbuilding or shed

816 Grain elevator, silo

819 Livestock, poultry storage

839 Refrigerated storage

849 Outside storage tank

880 Vehicle storage, other

881 Parking garage, (detached residential garage)

882 Parking garage, general vehicle

888 Fire station

891 Warehouse

899 Residential or self storage units

898 Dock, marina, pier, wharf

9 *Outside or Special Property*

900 Outside or special property, other

919 Dump, sanitary landfill

921 Bridge, trestle

922 Tunnel

926 Outbuilding, protective shelter

931 Open land or field

935 Campsite with utilities

936 Vacant lot

937 Beach

938 Graded and cared-for plots of land

940 Water area, other

941 Open ocean, sea or tidal waters

946 Lake, river, stream

951 Railroad right of way

952 Railroad yard

960 Street, other

961 Highway or divided highway

962 Residential street, road or residential driveway

963 Street or road in commercial area

965 Vehicle parking area

972 Aircraft runway

973 Aircraft taxi-way

974 Aircraft loading area

981 Construction site

982 Oil or gas field

983 Pipeline, power line or other utility right of way

984 Industrial plant yard - area

NNN None

UUU Undetermined

Name Prefix

MR Mr.

MRS Mrs.

MS Ms.

DR Doctor

REV Reverend

Name Suffix

JR Junior

SR Senior

I The First

II The Second

III The Third

IV The Fourth

MD Medical Doctor

DDS Doctor of Dental Science

Fire Module Data Dictionary**On-Site Materials - Section C****1 Foods, Beverages, Agriculture**

100 Foods, beverages, agriculture, other

11 Food

110 Food, other

111 Baked goods

112 Meat products, including poultry & fish

113 Dairy products

114 Produce, fruit or vegetables

115 Sugar, spices

116 Deli products

117 Cereals, grains; packaged

118 Fat/cooking grease, including lard & animal fat

12 Beverages

120 Beverages, other

121 Alcoholic beverage

122 Non-alcoholic beverage

13 Agriculture

130 Agriculture, other

131 Trees, plants, flowers

132 Feed, grain, seed

133 Hay, straw

134 Crop, not grain

135 Livestock

136 Pets

137 Pesticides

138 Fertilizer

2 Personal & Home Products

200 Personal & home products, other

21 Fabrics

210 Fabrics, other

211 Curtains, drapes

212 Linens

213 Bedding

214 Cloth, yarn, dry goods

22 Wearable products

220 Wearable products, other

221 Clothes

222 Footwear

223 Eyeglasses

225 Perfumes, colognes, cosmetics

226 Toiletries

23 Accessories

230 Accessories, other

231 Jewelry, watches

232 Luggage, suitcases

233 Purses, satchels, briefcases, wallets, belts

24 Furnishings

240 Furnishings, other

241 Furniture

242 Beds, mattresses

243 Clocks

244 Houseware

245 Glass, ceramics, china, pottery, stoneware

246 Silverware

3 Raw Materials

300 Raw materials, other

31 Wood

310 Wood, other

311 Lumber, sawn wood

312 Timber

313 Cork

314 Pulp

315 Sawdust, wood chips

32 Fibers

320 Fibers, other

321 Cotton

322 Wool

323 Silk

33 Animal skins

330 Animal skins, other

331 Leather

332 Fur

34 Other Raw Materials

341 Ore

342 Rubber

343 Plastics

344 Fiberglass

345 Salt

4 Paper Products, Rope

400 Paper products, rope, other

41 Paper products

410 Paper products, other

411 Newspaper, magazines

On-Site Materials - Section C (continued)

412	Books	610	Machinery, tools, other
413	Greeting Cards	611	Industrial Machinery
414	Paper - rolled	612	Machine parts
415	Cardboard	613	Tools (power & hand tools)
416	Packaged paper products, including stationary	62	<i>Construction supplies</i>
417	Paper records or reports	620	Construction supplies, other
42	<i>Rope, twine, cordage</i>	621	Hardware products
421	Rope, twine, cordage	622	Construction & home improvement products
5	<i>Flammables, Chemicals, Plastics</i>	623	Pipes, fittings
500	Flammables, chemicals, plastics, other	624	Stone-working materials
51	<i>Flammables, combustible liquids</i>	625	Lighting
510	Flammables, combustible liquids, other	626	Electrical: parts, supplies, equipment
511	Gasoline, diesel fuel	627	Insulation
512	Flammable liquid, not gasoline	628	Abrasives
513	Combustible liquid, including heating oil	629	Fencing, fence supplies
514	Motor oil	63	<i>Floor & wall coverings</i>
515	Heavy oils, grease, non-cooking related	630	Floor & wall coverings, other
516	Asphalt	631	Carpets, rugs
517	Adhesive, resin, tar	632	Linoleum, tile
52	<i>Flammable gases</i>	633	Ceramic tile
520	Flammable gas, other	634	Wallpaper
521	Natural gas	635	Paint
522	LP gas, Butane, Propane	64	<i>Metal products</i>
523	Hydrogen gas	640	Metal products, other
53	<i>Solid fuel, coal type</i>	641	Steel, iron products
530	Solid fuel, coal type, other	642	Non-ferrous metal products
531	Charcoal	643	Combustible metals products
532	Coal	7	<i>Appliances, Electronics, Medical, Laboratory</i>
533	Peat	700	Appliances, electronics, medical, lab, other
534	Coke	71	<i>Appliances, electronics</i>
54	<i>Chemicals, drugs</i>	710	Appliances, electronics, other
540	Chemicals, drugs, other	711	Appliances
541	Hazardous chemicals	712	Electronic: parts, supplies, equipment
542	Non-hazardous chemicals	713	Electronic media
543	Cleaning supplies	714	Photographic equipment, supplies, materials
544	Pharmaceuticals, drugs	72	<i>Medical, laboratory products</i>
545	Illegal drugs	720	Medical, laboratory products, other
55	<i>Radioactive materials</i>	721	Dental supply
551	Radioactive materials	722	Medical supply
6	<i>Construction, Machinery, Metals</i>	723	Optical products
600	Construction, machinery, metals, other	724	Veterinary supplies
61	<i>Machinery, tools</i>	725	Laboratory supplies
		8	<i>Vehicles, Vehicle Parts</i>

On-Site Materials - Section C (continued)**81 Motor vehicles**

- 810 Motor vehicles & parts, other
- 811 Autos, trucks, buses, recreational vehicles
- 812 Construction vehicles
- 813 Motor vehicle parts, not including tires
- 814 Tires

82 Watercraft

- 820 Watercraft, other
- 821 Boats, ships

83 Aircraft

- 830 Aircraft, other
- 831 Planes, airplanes
- 832 Helicopters

84 Rail

- 840 Rail, other
- 841 Trains, light rail, rapid transit cars
- 842 Rail equipment

85 Non-Motorized Vehicles

- 850 Non-Motorized Vehicles, other
- 851 Bicycles, tricycles, unicycles

9 Other Products**91 Containers, packing materials**

- 910 Containers, packing materials, other
- 911 Bottles, barrels, boxes
- 912 Packing material
- 913 Pallets

92 Previously owned products

- 920 Previously owned products, other
- 921 Antiques
- 922 Collectibles
- 923 Used merchandise

93 Ordnance, explosives, fireworks

- 930 Ordnance, explosives, fireworks, other
- 931 Guns
- 932 Ammunition
- 933 Explosives
- 934 Fireworks
- 935 Rockets, missiles

94 Recreation, arts (products)

- 940 Recreation, arts products, other
- 941 Musical instruments
- 942 Hobby, crafts

- 943 Art supply/artwork

- 944 Sporting goods

- 945 Camping, hiking, outdoor products

- 946 Games, toys

95 Mixed sales products

- 950 Mixed sales products, other

- 951 Office supplies

- 952 Restaurant supplies, not including food

96 Discarded material

- 960 Discarded material, other

- 961 Junk yard materials

- 962 Recyclable materials

- 963 Trash, not recyclable

- 000 On-site materials, other

- NNN None

- UUU Undetermined

On-site Materials Storage Use - Section C

- 1 Bulk storage or warehousing

- 2 Processing or manufacturing

- 3 Packaged goods for sale

- 4 Repair or service

- N None

- U Undetermined

Area of Fire Origin - Section D1**0 Means of Egress**

- 01 Corridor, mall

- 02 Exterior stairway, ramp, or fire escape

- 03 Interior stairway or ramp

- 04 Escalator - exterior, interior

- 05 Entrance way, lobby

- 09 Egress/exit, other

1 Assembly, Sales Areas (Groups of People)

- 11 Arena, assembly area w/ fixed seats - 100+ persons

- 12 Assembly area without fixed seats - 100+ persons

- 13 Assembly area - less than 100 persons

- 14 Common room, den, family room, living room, lounge

- 15 Sales area, showroom (exclude display window)

- 16 Art gallery, exhibit hall, library

- 17 Swimming pool

- 10 Assembly or sales area, other

Area of Fire Origin - Section D1 (continued)**2 *Function Area***

- 21 Bedroom - < 5 persons; included are jail or prison
- 22 Bedroom - 5+ persons; including barrack/dormitory
- 23 Bar area, beverage service area, cafeteria
- 24 Cooking area, kitchen
- 25 Bathroom, checkroom, lavatory, locker room
- 26 Laundry area, wash house (laundry)
- 27 Office
- 28 Personal service area, barber/beauty salon area
- 20 Function area, other

3 *Technical Processing Areas*

- 31 Laboratory
- 32 Dark room, photography area, or printing area
- 33 Treatment - first aid area, surgery area
- 34 Surgery area - major operations, operating room
- 35 Computer room, control room or center
- 36 Stage area - performance, basketball court, boxing
- 37 Projection room, spotlight area
- 38 Processing/manufacturing area, workroom
- 30 Technical processing areas, other

4 *Storage Areas*

- 41 Storage room, area, tank, or bin
- 42 Closet
- 43 Storage: supplies or tools; dead storage
- 44 Records storage room, storage vault
- 45 Shipping/receiving area; loading area, dock or bay
- 46 Chute/container - trash, rubbish, waste
- 47 Vehicle storage area; garage, carport
- 40 Storage area, other

5 *Service Areas*

- 51 Dumbwaiter or elevator shaft
- 52 Conduit, pipe, utility, or ventilation shaft
- 53 Light shaft
- 54 Chute; laundry or mail, excluding trash chutes
- 55 Duct: HVAC, cable, exhaust, heating, or AC
- 56 Display window
- 57 Chimney (conversion only)
- 58 Conveyor
- 50 Service facilities, other

6 *Service, Equipment Areas*

- 61 Machinery room or area; elevator machinery room
- 62 Heating room or area, water heater area

- 63 Switchgear area, transformer vault
- 64 Incinerator area
- 65 Maintenance shop or area, paint shop or area
- 66 Cell, test
- 67 Enclosure, pressurized air
- 60 Equipment or service area, other
- 7 *Structural Areas***
- 71 Substructure area or space, crawl space
- 72 Exterior balcony, unenclosed porch
- 73 Ceiling & floor assembly, crawl space between stories
- 74 Attic: vacant, crawl space above top story, cupola
- 75 Wall assembly
- 76 Wall surface: exterior
- 77 Roof surface: exterior
- 78 Awning
- 70 Structural area, other
- 8 *Transportation, Vehicle Areas***
- 81 Operator/passenger area of transportation equip.
- 82 Cargo/trunk area - all vehicles
- 83 Engine area, running gear, wheel area
- 84 Fuel tank, fuel line
- 85 Separate operator/control area of transportation
- 86 Exterior, exposed surface
- 80 Vehicle area, other
- 9 *Other Area of Origin***
- 91 Railroad right of way: on or near
- 92 Highway, parking lot, street: on or near
- 93 Courtyard, patio, porch, terrace
- 94 Open area - outside; included are farmland, field
- 95 Wildland, woods
- 96 Construction/renovation area
- 97 Multiple areas
- 98 Vacant structural area
- 90 Outside area, other
- 00 Other
- UU Undetermined

Heat Source - Section D2**1 *Operating Equipment***

- 11 Spark, ember or flame from operating equipment
- 12 Radiated, conducted heat from operating equipment
- 13 Arcing
- 10 Heat from powered equipment, other

Heat Source - Section D2 (continued)

4	<i>Hot or Smoldering Object</i>
41	Heat, spark from friction
42	Molten, hot material
43	Hot ember or ash
40	Hot or smoldering object, other
5	<i>Explosives, Fireworks</i>
51	Munitions
53	Blasting agent
54	Fireworks
55	Model and amateur rockets
56	Incendiary device
50	Explosive, fireworks, other
6	<i>Other Open Flame or Smoking Materials</i>
61	Cigarette
62	Pipe or cigar
63	Heat from undetermined smoking material
64	Match
65	Cigarette lighter
66	Candle
67	Warning or road flare; fusee
68	Backfire from internal combustion engine
69	Flame/torch used for lighting
60	Heat from other open flame or smoking materials
7	<i>Chemical, Natural Heat Sources</i>
71	Sunlight
72	Chemical reaction
73	Lightning
74	Other static discharge
70	Chemical, natural heat source, other
8	<i>Heat Spread from Another Fire</i>
81	Heat from direct flame, convection currents
82	Radiated heat from another fire
83	Flying brand, ember, spark
84	Conducted heat from another fire
80	Heat spread from another fire, other
9	<i>Other Heat Sources</i>
97	Multiple heat sources including multiple ignitions
00	Heat source: other
UU	Undetermined

Item First Ignited - Section D3

1	<i>Structural Component, Finish</i>
10	Structural component or finish, other
11	Exterior roof covering or finish
12	Exterior wall covering or finish
13	Exterior trim, including doors
14	Floor covering or rug/carpet/mat
15	Interior wall covering excluding drapes, etc.
16	Interior ceiling covering or finish
17	Structural member or framing
18	Insulation within structural area
2	<i>Furniture, Utensils, Including Built-in Furniture</i>
20	Furniture, utensils, other
21	Upholstered sofa, chair, vehicle seats
22	Non-upholstered chair, bench
23	Cabinetry (including built-in)
24	Ironing board
25	Appliance housing or casing
26	Household utensils
3	<i>Soft Goods, Wearing Apparel</i>
30	Soft goods, wearing apparel, other
31	Mattress, pillow
32	Bedding; blanket, sheet, comforter
33	Linen; other than bedding
34	Wearing apparel not on a person
35	Wearing apparel on a person
36	Curtains, blinds, drapery, tapestry
37	Goods not made up, including fabrics & yard goods
38	Luggage
4	<i>Adornment, Recreational Material, Signs</i>
40	Adornment, recreational material, signs, other
41	Christmas tree
42	Decoration
43	Sign, including outdoor signs such as billboards
44	Chips, including wood chips
45	Toy or game
46	Awning, canopy
47	Tarpaulin or tent
5	<i>Storage Supplies</i>
50	Storage supplies, other
51	Box, carton, bag, basket, barrel
52	Material being used to make a product

Item First Ignited - Section D3 (continued)

53	Pallet, skid (empty)
54	Cord, rope, twine
55	Packing, wrapping material
56	Baled goods or material
57	Bulk storage
58	Palletized material, material stored on pallets.
59	Rolled, wound material (paper, fabric)
6	Liquids, Piping, Filters
60	Liquids, piping, filters, other
61	Atomized liquid, vaporized liquid, aerosol.
62	Flammable liquid/gas - in/from engine or burner
63	Flammable liquid/gas - in/from final container
64	Flammable liquid/gas in container or pipe
65	Flammable liquid/gas - uncontained
66	Pipe, duct, conduit or hose
67	Pipe, duct, conduit, hose covering
68	Filter, including evaporative cooler pads
7	Organic Materials
70	Organic materials, other
71	Agricultural crop, including fruits and vegetables
72	Light vegetation - not crop, including grass
73	Heavy vegetation - not crop, including trees
74	Animal living or dead
75	Human living or dead
76	Cooking materials, including edible materials
77	Feathers or fur, not on bird or animal
8	General Materials
80	General materials, other (conversion only)
81	Electrical wire, cable insulation
82	Transformer, including transformer fluids
83	Conveyor belt, drive belt, V-belt
84	Tire
85	Railroad ties
86	Fence, pole
87	Fertilizer
88	Pyrotechnics, explosives
9	General Materials Continued
90	General materials continued (conversion only)
91	Book
92	Magazine, newspaper, writing paper
93	Adhesive
94	Dust, fiber, lint, including sawdust and excelsior

95	Film, residue, including paint & resin
96	Rubbish, trash, or waste
97	Oily rags
99	Multiple items first ignited
00	Item First Ignited, Other
UU	Undetermined

Type of Material First Ignited - Section D4

1	Flammable Gas
11	Natural gas
12	LP gas
13	Anesthetic gas
14	Acetylene
15	Hydrogen
10	Flammable gas, other
2	Flammable, Combustible Liquid
21	Ether, pentane type flammable liquid
22	JP-4 jet fuel & methyl ethyl ketone type flammable
23	Gasoline
24	Turpentine, butyl alcohol type flammable liquid
25	Kerosene, No.1 and 2 fuel oil, diesel type
26	Cottonseed oil, creosote oil type combustible
27	Cooking oil, transformer or lubricating oil
20	Flammable or combustible liquid, other
3	Volatile Solid or Chemical
31	Fat, grease, butter, margarine, lard
32	Petroleum jelly and non-food grease
33	Polish, paraffin, wax
34	Adhesive, resin, tar, glue, asphalt, pitch
35	Paint, varnish - applied
36	Combustible metal, included are magnesium
37	Solid chemical, included are explosives
38	Radioactive material
30	Volatile solid or chemical, other
4	Plastics
41	Plastic
5	Natural Product
51	Rubber, excluding synthetic rubbers
52	Cork
53	Leather
54	Hay, straw
55	Grain, natural fiber, (preprocess)
56	Coal, coke, briquettes, peat

Type of Material First Ignited - Section D4 (continued)

57	Food, starch, excluding fat and grease (Code 31)
58	Tobacco
50	Natural product, other
6	<i>Wood or Paper - Processed</i>
61	Wood chips, sawdust, shavings
62	Round timber, including round posts, poles
63	Sawn wood, including all finished lumber
64	Plywood
65	Fiberboard, particleboard, and hardboard
66	Wood pulp
67	Paper, including cellulose, waxed paper
68	Cardboard
60	Wood or paper, processed, other
7	<i>Fabric, Textiles, Fur</i>
71	Fabric, fiber, cotton, blends, rayon, wool
74	Fur, silk, other fabric.
75	Wig
76	Human hair
77	Plastic coated fabric
70	Fabric, textile, fur, other
8	<i>Material Compounded with Oil</i>
81	Linoleum
82	Oilcloth
86	Asphalt treated material
80	Material compounded with oil, other
9	<i>Other Material</i>
99	Multiple types of material
00	Type of material first ignited, other
UU	Undetermined

Cause of Ignition - Section E1

1	Intentional
2	Unintentional
3	Failure of equipment or heat source
4	Act of nature
5	Cause under investigation
0	Cause, other
U	Cause undetermined after investigation

Factors Contributing To Ignition - Section E2

1	<i>Misuse of Material or Product</i>
10	Misuse of material or product, other

11	Abandoned or discarded materials or products
12	Heat source too close to combustibles.
13	Cutting, welding too close to combustible
14	Flammable liquid or gas spilled
15	Improper fueling technique
16	Flammable liquid used to kindle fire
17	Washing part, painting with flammable liquid
18	Improper container or storage
19	Playing with heat source
2	<i>Mechanical Failure, Malfunction</i>
20	Mechanical failure, malfunction, other
21	Automatic control failure
22	Manual control failure
23	Leak or break
25	Worn out
26	Backfire
27	Improper fuel used
3	<i>Electrical Failure, Malfunction</i>
30	Electrical failure, malfunction, other
31	Water caused short-circuit arc
32	Short circuit arc from mechanical damage
33	Short circuit arc from defective, worn insulation
34	Unspecified short-circuit arc
35	Arc from faulty contact, broken conductor
36	Arc, spark from operating equipment
37	Fluorescent light ballast
4	<i>Design, Manufacturing, Installation Deficiency</i>
40	Design/Manufacture/Installation Deficiency, other
41	Design deficiency
42	Construction deficiency
43	Installation deficiency
44	Manufacturing deficiency
5	<i>Operational Deficiency</i>
50	Operational deficiency, other
51	Collision, knock down, run over, turn over
52	Accidentally turned on, not turned off
53	Equipment unattended
54	Equipment overloaded
55	Failure to clean
56	Improper start-up
57	Equipment used for not intended purpose
58	Equipment not being operated properly

Factors Contributing to Ignition - Section E2 (continued)**6 Natural Condition**

- 60 Natural condition, other
- 61 High wind
- 62 Storm
- 63 High water including floods
- 64 Earthquake
- 65 Volcanic action
- 66 Animal

7 Fire Spread or Control

- 70 Fire spread or control, other
- 71 Exposure fire
- 72 Rekindle
- 73 Outside/open fire for debris or waste disposal
- 74 Outside/open fire for warming or cooking
- 75 Agriculture or land management burns
- 00 Other factor contributed to ignition
- NN None
- UU Undetermined

Human Factors Contributing to Ignition - Section E3

- 1 Asleep
- 2 Possibly impaired by alcohol or drugs
- 3 Unattended or unsupervised person
- 4 Possibly mentally disabled
- 5 Physically disabled
- 6 Multiple persons involved
- 7 Age was a factor
- N None

Age Factor Gender - Section E3

- 1 Male
- 2 Female

Equipment Involved In Ignition - Section F1**1 Heating, Ventilating & Air Conditioning**

- 100 Heating, ventilating & air conditioning, other
- 111 Air conditioner
- 112 Heat pump
- 113 Fan
- 114 Humidifier
- 115 Ionizer
- 116 Dehumidifier

- 117 Evaporative cooler, cooling tower.
- 120 Fireplace, chimney, other
- 121 Fireplace, masonry
- 122 Fireplace, factory built
- 123 Fireplace, insert/stove
- 124 Stove, heating
- 125 Chimney connector, vent connector
- 126 Chimney - brick, stone, masonry
- 127 Chimney - metal, including stovepipe, flue
- 131 Furnace, local heating unit, built-in
- 132 Furnace, central heating unit
- 133 Boiler (power, process, heating)
- 141 Heater, excluding catalytic and oil-filled heaters
- 142 Heater, catalytic
- 143 Heater, oil filled
- 144 Heat lamp
- 145 Heat tape
- 151 Water heater
- 152 Steamline, heat pipe, hot air duct

2 Electrical Distribution, Lighting & Power Transfer

- 200 Electrical distribution, power transfer, other
- 210 Electrical wiring, other
- 211 Electrical power (utility) line
- 212 Electrical service supply wires from utility
- 213 Electric meter, meter box
- 214 Wiring from meter box to circuit breaker
- 215 Panelboard, switchboard, circuit breaker board
- 216 Electrical branch circuit
- 217 Outlet, receptacle
- 218 Wall switch
- 219 Ground fault interrupter, GFI
- 221 Transformer, distribution type
- 222 Overcurrent, disconnect equipment
- 223 Transformer, low voltage
- 224 Generator
- 225 Inverter
- 226 Uninterrupted power supply (UPS)
- 227 Surge protector
- 228 Battery charger, rectifier
- 229 Battery
- 230 Lamp, lighting, other
- 231 Lamp - tabletop, floor, desk
- 232 Lantern, flashlight

Equipment Involved In Ignition - Section F1 (continued)

233	Incandescent lighting fixture
234	Fluorescent lighting fixture, ballast
235	Halogen lighting fixture or lamp
236	Sodium, mercury vapor lighting fixtures or lamps;
237	Work light, trouble light
238	Light bulb
241	Nightlight
242	Decorative lights, line voltage
243	Decorative or landscape lighting, low voltage
244	Sign
251	Fence, electric
252	Traffic control device
253	Lightning rod, arrester/grounding device
260	Cord, plug, other
261	Power cord, plug - detachable from appliance
262	Power cord, plug - permanently attached
263	Extension cord

3 Shop Tools & Industrial Equipment

300	Shop or industrial equipment, other
310	Power tools, other
311	Power saw
312	Power lathe
313	Power shaper, router, jointer, planer
314	Power cutting tool
315	Power drill, screwdriver
316	Power sander, grinder, buffer, polisher
317	Power hammer, including jackhammers
318	Power nail gun, stud driver, stapler
320	Painting tools, other
321	Paint dipper
322	Paint flow coating machine
323	Paint mixing machine
324	Paint sprayer
325	Coating machine, including asphalt-saturating
331	Welding torch.
332	Cutting torch
333	Burners
334	Soldering equipment
340	Hydraulic equipment, other
341	Air compressor
342	Gas compressor
343	Atomizing equipment

344	Pump
345	Wet/dry vacuum (shop vacuum)
346	Hoist, lift
347	Powered jacking equipment
348	Drilling machinery or equipment
351	Heat treating equipment
352	Incinerator
353	Industrial furnace, kiln
354	Tarpot, tar kettle
355	Casting, molding, forging equipment
356	Distilling equipment
357	Digester, reactor
358	Extractor, waste recovery machine
361	Conveyor
362	Power transfer equipment: ropes, cables, blocks
363	Power take-off
364	Powered valves.
365	Bearing or brake
371	Picking, carding, weaving machine
372	Testing equipment
373	Gas regulator
374	Motor - separate
375	Internal combustion engine (non-vehicular)
376	Printing press
377	Car washing equipment
4 Commercial & Medical Equipment	
400	Commercial or medical equipment, other
410	Medical equipment, other
411	Dental, medical, or other powered bed or chair
412	Dental equipment, other
413	Dialysis equipment
414	Medical imaging equipment
415	Medical monitoring equipment
416	Oxygen administration equipment
417	Radiological equipment, X-ray, radiation therapy
418	Sterilizer: medical
419	Therapeutic equipment
421	Transmitter
422	Telephone switching gear, including PBX
423	TV monitor array
424	Studio type TV camera
425	Studio type sound recording/modulating equipment
426	Radar equipment

Equipment Involved In Ignition - Section F1 (continued)

431	Amusement ride equipment
432	Ski lift
433	Elevator or lift
434	Escalator
441	Microfilm, microfiche viewing equipment
442	Photo processing equipment
443	Vending machine
444	Non video arcade game
445	Water fountain, water cooler
446	Telescope
450	Laboratory equipment, other
451	Electron microscope

5 *Garden Tools & Agricultural Equipment*

500	Gardening tools or agricultural equipment, other
511	Combine, threshing machine
512	Hay processing equipment
513	Elevator or conveyor: farm
514	Silo loader, unloader, screw/sweep auger
515	Feed grinder, mixer, blender
516	Milking machine
517	Pasteurizer
518	Cream separator
521	Sprayer: farm or garden
522	Chain saw
523	Weed burner
524	Lawn mower
525	Lawn, landscape trimmer, edger
531	Lawn vacuum
532	Leaf blower
533	Mulcher, grinder, chipper
534	Snow blower, thrower
535	Log splitter
536	Post-hole auger
537	Post driver, pile driver
538	Tiller, cultivator

6 *Kitchen & Cooking Equipment*

600	Kitchen & cooking equipment, other
611	Blender, juicer, food processor, mixer
612	Coffee grinder
621	Can opener
622	Knife
623	Knife sharpener

631	Coffee maker or teapot
632	Food warmer, hot plate
633	Kettle
634	Popcorn popper
635	Pressure cooker or canner
636	Slow cooker
637	Toaster, toaster oven, counter-top broiler
638	Waffle iron, griddle
639	Wok, frying pan, skillet
641	Breadmaking machine
642	Deep fryer
643	Grill, hibachi, barbecue
644	Microwave oven
645	Oven, rotisserie
646	Range with or without oven, cooking surface
647	Steam table, warming drawer/table
651	Dishwasher
652	Freezer when separate from refrigerator
653	Garbage disposer
654	Grease hood/duct exhaust fan
655	Ice maker (separate from refrigerator)
656	Refrigerator, refrigerator/freezer
7	<i>Electronic and Other Electrical Equipment</i>
700	Electronic equipment, other
710	Computer device, other
711	Computer
712	Computer storage device: external
713	Computer modem: external
714	Computer monitor
715	Computer printer
716	Computer projection device, LCD panel
720	Office equipment, other
721	Adding machine, calculator
722	Telephone or answering machine
723	Cash register
724	Copier
725	Fax machine
726	Paper shredder
727	Postage, shipping meter equipment
728	Typewriter
730	Musical instrument, other
731	Guitar
732	Piano, organ

Equipment Involved In Ignition - Section F1 (continued)

733	Musical synthesizer or keyboard
740	Sound recording or receiving equipment, other
741	CD player (audio)
742	Laser disk player
743	Radio
744	Radio, two way
745	Record player, phonograph, turntable
747	Speakers, audio - separate components
748	Stereo equipment
749	Tape recorder or player
750	Video equipment, other
751	Cable converter box
752	Projector: film, slide, overhead
753	Television
754	VCR or VCR/TV combination
755	Video game - electronic
756	Camcorder, video camera
757	Photographic camera and equipment
8	<i>Personal & Household Equipment</i>
800	Personal or household equipment, other
811	Clothes dryer
812	Trash compactor
813	Washer/dryer combination (within one frame)
814	Washing machine - clothes
821	Hot tub, whirlpool, spa
822	Swimming pool equipment
830	Floor care equipment, other
831	Broom - electric
832	Carpet cleaning equipment, including rug shampooer
833	Floor buffer, waxer, cleaner
834	Vacuum cleaner
841	Comb, hair brush
842	Curling iron
843	Electrolysis equipment
844	Hair curler warmer
845	Hair dryer
846	Makeup mirror - lighted
847	Razor, shaver
848	Suntan equipment, sunlamp
849	Toothbrush
850	Portable appliance designed to produce heat, other
851	Baby bottle warmer

852	Blanket - electric
853	Heating pad
854	Clothes steamer
855	Clothes iron
861	Automatic door opener - not garage
862	Burglar alarm
863	Garage door opener
864	Gas detector
865	Intercom
866	Smoke or heat detector, fire alarm
868	Thermostat
871	Ashtray
872	Charcoal lighter
873	Cigarette lighter, pipe lighter
874	Fire extinguishing equipment
875	Insect trap
876	Timer
881	Model vehicles.
882	Toy, powered
883	Woodburning kit
891	Clock
892	Gun
893	Jewelry cleaning machine
894	Scissors
895	Sewing machine
896	Shoe polisher
897	Sterilizer
000	Other equipment involved in ignition
NNN	None
UUU	Undetermined

Equipment Power Source - Section F2***1 Electrical***

11	Electrical line voltage (≥ 50 volts)
12	Batteries and low voltage (< 50 volts)
10	Electrical, other

2 Gas Fuels

21	Natural gas or other lighter than air gas
22	LP gas or other heavier than air gas
20	Gas fuels, other

3 Liquid Fuels

31	Gasoline
32	Alcohol

Equipment Power Source - Section F2 (continued)

33 Kerosene, diesel, No.1 & 2 fuel oil

34 No.4, 5 & 6 fuel oils

30 Liquid fuel, other

4 Solid Fuels

41 Wood, paper

42 Coal, charcoal

43 Chemicals

40 Solid fuel, other

5 Other

51 Compressed air

52 Steam

53 Water

54 Wind

55 Solar

56 Geothermal

57 Nuclear

58 Fluid/hydraulic power source

00 Other power source

UU Undetermined

Equipment Portability - Section F3

1 Portable

2 Stationary

Fire Suppression Factors - Section G**1 Building Construction or Design Factors**

100 Building construction or design factors, other

112 Roof collapse

113 Roof assembly combustible

121 Ceiling collapse

125 Holes or openings in walls or ceilings

131 Wall collapse

132 Difficult to ventilate

134 Combustible interior finish

137 Balloon construction

138 Internal arrangement of partitions

139 Internal arrangement of stock or contents

141 Floor collapse

151 Lack of fire barrier walls or doors

153 Transoms

161 Attic undivided

166 Insulation combustible

173 Stairwell not enclosed

174 Elevator shaft

175 Dumbwaiter

176 Ducts: vertical

177 Chute: rubbish, garbage, laundry

181 Supports unprotected

182 Composite plywood I beam construction

183 Composite roof/floor sheathing construction

185 Wood truss construction

186 Metal truss construction

187 Fixed burglar protection assemblies (bars, grills

188 Quick release failure of bars on windows or doors

192 Previously damaged by fire

2 Act or Omission

200 Act or omission, other

213 Doors left open or outside door unsecured

214 Fire doors blocked or did not close properly

218 Violation of fire, building or life safety code

222 Illegal and clandestine drug operation

232 Intoxication, drugs or alcohol

253 Riot or civil disturbance, including hostile acts

254 Persons interfered with operations

283 Accelerant used

3 On-Site Materials

300 Building contents, other

311 Aisles blocked or improper width

312 Significant/unusual fuel load structure components

313 Significant/unusual fuel load from contents

314 Significant/unusual fuel load outside from natural

315 Significant fuel load from man-made condition.

316 Storage, improper

321 Radiological hazard onsite

322 Biological hazard onsite

323 Cryogenic hazard onsite

324 Hazardous chemical, corrosive material, or oxidize

325 Flammable/combustible liquid hazard

327 Explosives hazard present

331 Decorations, included are crepe paper, garland

341 Natural or other lighter than air gas present

342 Liquefied Petroleum (LPG) gas present

361 Combustible storage > 12 feet

362 High rack storage

Fire Suppression Factors - Section G (continued)**4 Delays**

400	Delays, other
411	Delayed detection of fire
412	Delayed reporting of fire
413	Alarm system malfunction
414	Alarm system shut off for valid reason
415	Alarm System inappropriately shut off
421	Unable to contact Fire Department
424	Information incomplete or incorrect
425	Communications problem
431	Blocked or obstructed roadway
434	Poor or no access for fire department apparatus
435	Traffic delay
436	Trouble finding location
437	Size, height, or other building characteristic
438	Power lines down/arcing
443	Poor access for firefighters
444	Secured area
445	Guard dogs
446	Aggressive animals, excluding guard dogs
447	Delay from evaluation of hazmats at incident scene
448	Locked or jammed doors
451	Apparatus failure before arrival at incident
452	Hydrants inoperative
461	Airspace restriction
462	Military activity
481	Closest apparatus unavailable

5 Protective Equipment

500	Protective equipment factor, other
510	Automatic fire suppression system problem.
520	Automatic sprinkler, standpipe connection problem
531	Water supply inadequate: private
532	Water supply inadequate: public
543	Electrical power outage
561	Failure of rated fire protection assembly
562	Protective equipment negated

6 Egress/Exit Factors

600	Egress/exit problem, other
611	Occupancy load above legal limit
612	Evacuation activity impeded FD access
613	Window type impedes egress
614	Windowless wall

621	Young occupants
622	Elderly occupants
623	Physically disabled occupants
624	Mentally disabled occupants
625	Physically restrained/confined occupants
626	Medically disabled occupants
641	Special Event
642	Public Gathering

7 Natural Conditions

700	Natural conditions, other
711	Drought or low fuel moisture
712	Humidity low
713	Humidity high
714	Temperature: low
715	Temperature: high
721	Fog
722	Flooding
723	Ice
724	Rain
725	Snow
732	Wind, including hurricanes or tornadoes
741	Earthquake
760	Unusual vegetation fuel loading
771	Threatened or endangered species
772	Timber sale activity
773	Fire restriction
774	Historic disturbance
775	Urban-Wildland Interface Area
000	Fire suppression factor, other
NNN	None
UUU	Undetermined (conversion only)

Mobile Property Involved - Section H1

1	Not involved in ignition, but burned
2	Involved in ignition, but did not itself burn
3	Involved in ignition and burned
N	None

Mobile Property Type - Section H2**1 Passenger Or Road Transport Vehicles**

11	Passenger car.
12	Bus, school bus, trackless trolley
13	Off-road recreational vehicle

Mobile Property Type - Section H2 (continued)

14	Motor home, camper, bookmobile.
15	Trailer - travel, designed to be towed
16	Trailer - camping, collapsible
17	Mobile home
18	Motorcycle, trail bike
10	Passenger road vehicle, other
2	<i>Freight Road Vehicles</i>
21	General use truck, dump truck, fire apparatus
22	Hauling rig (non-motorized), pickup truck
23	Trailer - semi, designed for freight
24	Tank truck - nonflammable cargo
25	Tank truck - flammable or combustible liquid
26	Tank truck - compressed gas or LP-gas
27	Garbage, waste, refuse truck
20	Freight road transport vehicle, other
3	<i>Transport Vehicles</i>
31	Diner car, passenger car - rail
32	Box, freight, or hopper car - rail
33	Tank car - rail
34	Container or piggyback car - rail
35	Engine/locomotive - rail
36	Rapid transit car, trolley - self-powered
37	Maintenance equipment car
30	Rail transport vehicle, other
4	<i>Water Vessels</i>
41	Boat: shorter than 65 ft. with power
42	Boat, ship, or >= 65 ft but < 1,000 tons
43	Cruise liner or passenger ship >= 1,000 tons
44	Tank ship
45	Personal water craft
46	Cargo or military ship > 1,000 tons
47	Barge, petroleum balloon, towable water vessel
48	Commercial fishing or processing vessel
49	Sailboat
40	Water transport vessel, other
5	<i>Aircraft</i>
51	Personal aircraft less than 12,500 lb. gross wt.
52	Personal aircraft >= 12,500 lb. gross wt.
53	Commercial transport: prop. plane/fixed wing
54	Commercial jet: fixed wing
55	Helicopter - nonmilitary
56	Military fixed wing aircraft

57	Military non fixed wing aircraft
58	Balloon vehicles
50	Air transport vehicle, other
6	<i>Industrial, Agricultural, Construction Vehicles</i>
61	Construction vehicles
63	Loader - industrial, fork lift, tow motor, stacker
64	Crane
65	Agricultural vehicle, baler, chopper (farm use)
67	Timber harvest vehicle
60	Industrial, constr., agricultural vehicle, other
7	<i>Mobile Property, Miscellaneous</i>
71	Home, garden vehicle
73	Shipping container, mechanically moved
74	Armored vehicle
75	Missile, rocket, space vehicle
76	Aerial tramway vehicle
00	Mobile property, other
NN	None
UU	Undetermined (conversion only)

Mobile Property Make - Section H2

AC	Acura
AM	Aston Martin
AR	Alfa Romeo
AT	ATK
AU	Audi
AV	Antique Vehicle
BE	Beta
BL	Buell
BM	BMW
BU	Buick
CC	Crane Carrier (CCC)
CD	Cadillac
CH	Chevrolet
CP	Caterpillar
CR	Chrysler
CV	Classic Vehicle
DA	Daihatsu
DO	Dodge
DR	Diamond Reo
DU	Ducati
EA	Eagle
FE	Ferrari

Mobile Property Make - Section H2 (continued)

FO	Ford
FR	Freightliner
FW	FWD
GE	Geo
GM	GMC (General Motors)
HD	Harley Davidson
HI	Hino
HO	Honda
HU	Husqverna
HY	Hyundai
IF	Infiniti
IN	International
IS	Isuzu
IT	Italjet
IV	Iveco
JA	Jaguar
JE	Jeep
KA	Kawasaki
KE	Kenworth
KI	Kia
KT	KTM
LE	Lexus
LI	Lincoln
LO	Lotus
LR	Land Rover
MA	Maico
MB	Mercedes Benz
MC	Mercury
MG	Moto Guzzi
MH	Marmon
MK	Mack
ML	Maely
MM	Moto Morini
MO	Montesa
MR	Merkur
MS	Maserati
MT	Mitsubishi
MZ	Mazda
NA	Navistar

NI	Nissan
OL	Oldsmobile
OS	Oshkosh
PI	Pierce
PL	Plymouth
PN	Pontiac
PR	Porsche
PT	Peterbilt
PU	Peugeot
RG	Rogue (Ottawa)
RN	Range Rover
RR	Rolls Royce
SA	Saturn
SB	Saab
SC	Scania
SD	Simon Duplex
ST	Sterling
SU	Subaru
SZ	Suzuki
TO	Toyota
TR	Triumph
UD	UD
UT	Utilmaster
VE	Vespa
VG	Volvo GMC
VL	Volvo
VO	Volkswagen
WG	White GMC
WK	Walker
WL	Walter
WS	Western Star
YA	Yamaha
YU	Yugo
OO	Other Make

Reports Attached

1	Arson Report Attached
2	Police Report Attached
3	Coroner Report Attached
4	Other Reports Attached

Structure Fire Module Data Dictionary

Structure Type - Section I1

- 1 Enclosed building
- 2 Fixed portable or mobile structure
- 3 Open structure
- 4 Air supported structure
- 5 Tent
- 6 Open platform
- 7 Underground structure work areas
- 8 Connective structure
- 0 Structure type, other

Building Status - Section I2

- 1 Under construction
- 2 Occupied and operating
- 3 Idle, not routinely used
- 4 Under major renovation
- 5 Vacant and secured
- 6 Vacant and unsecured
- 7 Being demolished
- 0 Other
- U Undetermined

Fire Spread - Section J2

- 1 Confined to object of origin
- 2 Confined to room of origin
- 3 Confined to floor of origin
- 4 Confined to building of origin
- 5 Beyond building of origin

Item Contributing Most to Flame Spread - Section K1

Please Note:

The code set table used for this data element is the same set that is used for "Item First Ignited" - section D3 in the Fire Module, with the exception of "99, Multiple Items First Ignited" which is excluded from this code-set. Please refer to page 173 for the codes listed for that data element.

Type Material Contributing to Flame Spread - Section K1

Please Note:

The code set table used for this data element is the same set that is used for "Type of Material First Ignited", - D4 in the Fire Module, with the exception of "99 Multiple Type of Material", which

is excluded from this code-set. Please refer to page 174 for the codes listed for that data element.

Detectors - Section L

L1 Presence of Detectors

- 1 Present
- N Not present
- U Undetermined

L2 Detector Type

- 1 Smoke
- 2 Heat
- 3 Combination smoke & heat in a single unit
- 4 Sprinkler, water flow detection
- 5 More than one type present
- 0 Detector type, other
- U Undetermined

L3 Detector Power Supply

- 1 Battery only
- 2 Hardwire only
- 3 Plug in
- 4 Hardwire with battery
- 5 Plug-in with battery
- 6 Mechanical
- 7 Multiple detectors & power supplies
- 0 Detector power supply, other
- U Undetermined

L4 Detector Operation

- 1 Fire too small to activate detector
- 2 Detector operated
- 3 Detector failed to operate
- U Undetermined

L5 Detector Effectiveness

- 1 Alerted occupants, occupants responded
- 2 Alerted occupants, occupants failed to respond
- 3 There were no occupants
- 4 Failed to alert occupants
- U Undetermined

Detectors - Section L (continued)***L6 Detector Failure Reason***

- 1 Power failure, shut-off or disconnect of hardwired detector
- 2 Improper installation or placement
- 3 Defective
- 4 Lack of maintenance, includes not cleaning
- 5 Battery missing or disconnected
- 6 Battery discharged or dead
- 0 Detector failure reason, other
- U Undetermined

Extinguishment Systems - Section M***M1 Presence of Automatic Extinguishing System***

- 1 Present
- N None Present

M2 Type of Automatic Extinguishing System

- 1 Wet-pipe sprinkler
- 2 Dry-pipe sprinkler
- 3 Other sprinkler system
- 4 Dry chemical system
- 5 Foam system
- 6 Halogen type system
- 7 Carbon dioxide system

- 0 Special hazard system, other

- U Undetermined

M3 Operation of Automatic Extinguishing System

- 1 System operated and was effective
- 2 System operated and was not effective
- 3 Fire too small to activate system
- 4 System did not operate
- 0 Operation of AES, other
- U Undetermined

M5 Reason System Not Effective

- 1 System shut off
- 2 Not enough agent discharged to control the fire
- 3 Agent discharged, but did not reach the fire
- 4 Inappropriate system for the type of fire
- 5 Fire not in area protected by the system
- 6 System components damaged
- 7 Lack of maintenance, including corrosion or heads painted
- 8 Manual intervention defeated the system
- 0 Reason system not effective, other
- U Undetermined

Civilian Fire Casualty Module Dictionary**Gender - Section B**

- 1 Male
- 2 Female

Race - Section E1

- 1 White
- 2 Black
- 3 American Indian, Eskimo or Aleut
- 4 Asian
- 0 Other, includes multi-racial
- U Undetermined

Ethnicity - Section E2

- 1 Hispanic
- 0 Other

Affiliation - Section F

- 1 Civilian
- 2 EMS - not fire department
- 3 Police
- 0 Other
- U Undetermined (conversion only)

Severity - Section H

- 1 Minor
- 2 Moderate
- 3 Severe
- 4 Life threatening
- 5 Death
- U Undetermined

Cause of Injury - Section I

- 1 Exposed to fire products
- 2 Exposed to hazardous materials or toxic fumes
- 3 Jumped in escape attempt
- 4 Fell, slipped or tripped
- 5 Caught or trapped
- 6 Structural collapse
- 7 Struck by or contact with object
- 8 Overexertion
- 9 Multiple causes

- 0 Other
- U Undetermined
- N None (conversion only)

Human Factors Contributing to Injury - Section J

- 1 Asleep
- 2 Unconscious
- 3 Possibly impaired by alcohol
- 4 Possibly impaired by other drug or chemical
- 5 Possibly mentally disabled
- 6 Physically disabled
- 7 Physically restrained
- 8 Unattended or unsupervised person
- N None

Factors Contributing to Injury - Section K***1 Egress***

- 11 Crowd situation, limited exits
- 12 Mechanical obstacles to exit
- 13 Locked exit or other problem with exit
- 14 Problem with quick release burglar or security bar
- 15 Burglar or security bar, intrusion barrier
- 16 Window type impeded egress
- 10 Egress problem, other

2 Fire Pattern

- 21 Exits blocked by flame
- 22 Exits blocked by smoke
- 23 Vision blocked or impaired by smoke
- 24 Trapped above fire
- 25 Trapped below fire
- 20 Fire pattern, other

3 Escape

- 31 Unfamiliar with exits
- 32 Excessive travel distance to nearest clear exit
- 33 Chose inappropriate exit route
- 34 Re-entered building
- 35 Clothing caught fire while escaping
- 30 Escape, other

4 Collapse

- 41 Roof collapse
- 42 Wall collapse
- 43 Floor collapse
- 40 Collapse, other

Factors Contributing to Injury - Section K (continued)

5	<i>Vehicle-Related Factors</i>
51	Trapped in/by vehicle
52	Vehicle collision, roll-over
50	Vehicle-related, other
6	<i>Equipment Related Factors</i>
61	Unvented heating equipment
62	Improper use of heating equipment
63	Improper use of cooking equipment
60	Equipment related factors, other
9	<i>Other</i>
91	Clothing burned, not while escaping
92	Overexertion
00	Other factor contributed to injury
NN	None
UU	Undetermined (conversion only)

Activity When Injured - Section L

1	Escaping
2	Rescue attempt
3	Fire control
4	Returning to vicinity of fire before control
5	Returning to vicinity of fire after control
6	Sleeping
7	Unable to act
8	Irrational act
0	Other activity
U	Undetermined

Location at Time of Incident - Section M

1	In area of origin and not involved
2	Not in area of origin & not involved
3	Not in area of origin, but involved
4	In area of origin and involved
0	Other location
U	Undetermined

General Location at Time of Incident - Section M

1	In area of origin
2	In building, but not in area of origin
3	Outside, not in area of origin
U	Undetermined

Specific Location at Time of Injury - Section M**Please Note:**

The code set table used for this data element is the same set that is used for "Area of Fire Origin" - section D1 in the Fire Module. Please refer to page 171 for the codes listed for that data element.

Primary Apparent Symptom - Section N

01	Smoke inhalation
02	Hazardous fumes inhalation
03	Breathing difficulty or shortness of breath
11	Burns and smoke inhalation
12	Burns only: thermal
13	Burn: scald
14	Burn: chemical
15	Burn: electric
21	Cut or laceration
22	Stab wound/puncture wound: penetrating
23	Gunshot wound; projectile wound
24	Contusion/bruise: minor trauma
25	Abrasion
31	Dislocation
32	Fracture
33	Strain or sprain
34	Swelling
35	Crushing
36	Amputation
41	Cardiac symptoms
42	Cardiac arrest
43	Stroke
44	Respiratory arrest
51	Chills
52	Fever
53	Nausea
54	Vomiting
55	Numbness or tingling, paresthesia
56	Paralysis
57	Frostbite
50	Sickness, other
61	Miscarriage
63	Eye trauma, avulsion
64	Drowning
65	Foreign body obstruction
66	Electric shock
67	Poison

Primary Apparent Symptom - Section N (continued)

71	Convulsion or seizure
72	Internal trauma
73	Hemorrhaging, bleeding internally
81	Disorientation
82	Dizziness/fainting/weakness
83	Exhaustion/fatigue, including heat exhaustion
84	Heat stroke
85	Dehydration
91	Allergic reaction, including anaphylactic shock
92	Drug overdose
93	Alcohol impairment
94	Emotional/psychological stress
95	Mental disorder
96	Shock
97	Unconscious
98	Pain only
00	Other symptom
NN	None
UU	Undetermined

Primary Area of Body Injured - Section O

1	Head
2	Neck or shoulder
3	Thorax, includes chest and back, excludes spine
4	Abdomen
5	Spine
6	Upper extremities
7	Lower extremities
8	Internal
9	Multiple body parts
0	Other area (conversion only)
U	Undetermined (conversion only)

Civilian Fire Casualty Disposition - Section P

1	Transported to emergency care facility
---	--

Fire Service Casualty Module Data Dictionary**Gender - Section B**

- 1 Male
- 2 Female

Career Status - Section B

- 1 Career
- 2 Volunteer

Usual Assignment - Section G1

- 1 Suppression, included are hazmat, rescue, & IC
- 2 EMS
- 3 Prevention or inspection
- 4 Training
- 5 Maintenance
- 6 Communications
- 7 Administration
- 8 Fire investigation
- 0 Other assignment

Physical Condition Just Prior To Injury - Section G2

- 1 Rested
- 2 Fatigued
- 4 Ill or injured
- 0 Other condition
- U Undetermined

Severity - Section G3

- 1 Report only, including exposure
- 2 First aid only
- 3 Treated by physician, not a lost-time injury
- 4 Lost time injury, moderate severity
- 5 Lost time injury, severe
- 6 Lost time injury, life threatening
- 7 Death

Taken To - Section G4

- 1 Hospital
- 4 Doctor's office
- 5 Morgue or funeral home
- 6 Residence
- 7 Station or quarters

- N Not transported
- 0 Taken to, other

Activity At Time of Injury - Section G5***1 Driving or Riding Vehicle***

- 11 Boarding fire department vehicle
- 12 Driving fire department vehicle
- 13 Tillering fire department vehicle
- 14 Riding fire department vehicle
- 15 Getting off fire department vehicle
- 16 Driving/riding non-fire department vehicle
- 17 Getting off non-fire department vehicle
- 10 Driving or riding vehicle, other

2 Fire Department Apparatus

- 21 Operating engine or pumper
- 22 Operating aerial ladder or platform
- 23 Operating EMS vehicle
- 24 Operating HazMat vehicle
- 25 Operating rescue vehicle
- 20 Operating fire department apparatus, other

3 Extinguishing Fire or Neutralizing Incident

- 31 Handling charged hose lines
- 32 Using hand extinguishers
- 33 Operating master stream device
- 34 Using hand tools in extinguishment activity
- 35 Removing power lines
- 36 Removing flammable liquids/chemicals
- 37 Shutting off utilities, gas lines, etc.
- 30 Extinguishing fire/neutralizing incident, other

4 Suppression Support

- 41 Forcible entry
- 42 Ventilation with power tools
- 43 Ventilation with hand tools
- 44 Salvage
- 45 Overhaul
- 40 Suppression support, other

5 Access or Egress

- 51 Carrying ground ladder
- 52 Raising ground ladder
- 53 Lowering ground ladder
- 54 Climbing ladder
- 55 Scaling
- 56 Escaping fire/hazard

Activity At Time of Injury - Section G5 (continued)

57	Moving/lifting patient with carrying device
58	Lifting/carrying patient without carrying device
50	Access/egress, other
6	<i>EMS / Rescue</i>
61	Searching for victim
62	Rescuing fire victim
63	Rescuing non-fire victim
64	Water rescue
65	Providing EMS care
66	Diving operations
67	Extraction with power tools
68	Extraction with hand tools
60	EMS/rescue, other
7	<i>Other Incident Scene Activity</i>
71	Directing traffic
72	Catching hydrant
73	Laying hose
74	Moving tools or equipment around scene
75	Picking up tools, equipment, or hose on scene
76	Setting up lighting
77	Operating portable pump
70	Other incident scene activity, other
8	<i>Station Activity</i>
81	Moving about station, alarm sounding
82	Moving about station, normal activity
83	Station maintenance
84	Vehicle maintenance
85	Equipment maintenance
86	Physical fitness activity, supervised
87	Physical fitness activity, unsupervised
88	Training activity or drill
80	Station activity, other
9	<i>Other Activity</i>
91	Incident investigation, during incident
92	Incident investigation, after incident
93	Inspection activity
94	Administrative work
95	Communications work
00	Activity, other
UU	Undetermined

Primary Apparent Symptom - Section H1

01	Smoke inhalation
02	Hazardous fumes inhalation
03	Breathing difficulty or shortness of breath
11	Burns and smoke inhalation
12	Burns only: thermal
13	Burn: scald
14	Burn: chemical
15	Burn: electric
21	Cut or laceration
22	Stab wound/puncture wound: penetrating
23	Gunshot wound; projectile wound
24	Contusion/bruise: minor trauma
25	Abrasion
31	Dislocation
32	Fracture
33	Strain or sprain
34	Swelling
35	Crushing
36	Amputation
41	Cardiac symptoms
42	Cardiac arrest
43	Stroke
44	Respiratory arrest
51	Chills
52	Fever
53	Nausea
54	Vomiting
55	Numbness or tingling, paresthesia
56	Paralysis
57	Frostbite
50	Sickness, other
61	Miscarriage
63	Eye trauma, avulsion
64	Drowning
65	Foreign body obstruction
66	Electric shock
67	Poison
71	Convulsion or seizure
72	Internal trauma
73	Hemorrhaging, bleeding internally
81	Disorientation
82	Dizziness/fainting/weakness

Primary Apparent Symptom - Section H1 (continued)

83	Exhaustion/fatigue, including heat exhaustion
84	Heat stroke
85	Dehydration
91	Allergic reaction, including anaphylactic shock
92	Drug overdose
93	Alcohol impairment
94	Emotional/psychological stress
95	Mental disorder
96	Shock
97	Unconscious
98	Pain only
00	Other
NN	None
UU	Undetermined

Primary Area of Body Injured - Section H2

1	<i>Head</i>
11	Ear
12	Eye
13	Nose
14	Mouth included are lips, teeth and interior
10	Head, other
2	<i>Neck & Shoulders</i>
21	Neck
22	Throat
23	Shoulder
3	<i>Thorax</i>
31	Back, except spine
32	Chest
30	Thorax, other (conversion only)
4	<i>Abdominal Area</i>
41	Abdomen
42	Pelvis or groin
43	Hip, lower back or buttocks
5	<i>Spine</i>
51	Spine
6	<i>Upper Extremities</i>
61	Arm-upper, not including elbow or shoulder
62	Arm-lower, not including elbow or wrist
63	Elbow
64	Wrist
65	Hand and fingers

60 Upper extremities, other (conversion only)

Lower Extremities

71	Leg-upper
72	Leg-lower
73	Knee
74	Ankle
75	Foot and toes
70	Lower extremities, other (conversion only)

8 Internal

81	Trachea and lungs
82	Heart
83	Stomach
84	Intestinal tract
85	Genito-urinary
80	Internal, other

9 Multiple Parts

91	Multiple body parts - upper part of body
92	Multiple body parts - lower part of body
93	Multiple body parts - whole body
00	Body part, other
UU	Part of body undetermined
NN	None

Cause of Firefighter Injury - Section I1

1	Fall
2	Jump
3	Slip/trip
4	Exposure to hazard
5	Struck or assaulted by person/animal/object
6	Contact with object (firefighter moved into/onto)
7	Overexertion/strain
0	Other cause
U	Undetermined

Factor Contributing to Injury - Section I2***1 Collapse or Falling Object***

11	Roof collapse
12	Wall collapse
13	Floor collapse
14	Ceiling collapse
15	Stair collapse
16	Falling objects
17	Cave-in (earth)

Factor Contributing to Injury - Section I2 (continued)

10 Collapse or falling object, other

2 Fire Development

21 Fire progress, including smoky conditions

22 Backdraft

23 Flashover

24 Explosion

20 Fire development, other

3 Lost, Caught, Trapped, Confined

31 Person physically caught or trapped

32 Lost in building

33 Operating in confined structural areas

34 Operating under water or ice

30 Lost, caught, trapped, or confined, other

4 Holes

41 Unguarded hole in structure

42 Hole burned through roof

43 Hole burned through floor

40 Holes, other

5 Slippery or Uneven Surfaces

51 Icy surface

52 Wet surface, included are water/soap/foam, etc.

53 Loose material on surface

54 Uneven surface, included are holes in the ground

50 Slippery or uneven surfaces, other

6 Vehicle or Apparatus

61 Vehicle left road or overturned

62 Vehicle collided with another vehicle

63 Vehicle collided with non-vehicular object

64 Vehicle stopped too fast

65 Seat belt not fastened

66 Firefighter standing on apparatus

60 Vehicle or apparatus, other

9 Other Contributing Factors

91 Civil unrest, including riots/civil disturbances

92 Hostile acts

00 Other factor contributed to injury

NN None

UU Undetermined

Object Involved in Injury - Section I3

11 Coupling

12 Hose, not charged

13 Hose, charged

14 Water from master stream

15 Water from hose line

16 Water, not from a hose

17 Steam

18 Extinguishing agent

21 Ladder: aerial

22 Ladder: ground

23 Tools/equipment

24 Knife, scissors

25 Syringe

26 FD Vehicle/apparatus

27 FD Vehicle door, including apparatus compartments

28 Station sliding pole

31 Curb

32 Door in building

33 Fire escape

34 Ledge

35 Stairs

36 Wall, including other vertical surfaces

37 Window

38 Roof

39 Floor or ceiling

30 Structural component, other

41 Asbestos

42 Dirt, stones, or debris

43 Glass

45 Nails

46 Splinters

47 Embers

48 Hot tar

49 Hot metal

51 Biological agents

52 Chemicals

53 Fumes, gases, or smoke

54 Poisonous plants

55 Insects

56 Radioactive materials

61 Electricity

62 Extreme weather

63 Utility flames, flares, torches

64 Heat or flame

91 Person: victim

Object Involved in Injury - Section I3 (continued)

92	Property and structure contents
93	Animal
94	Vehicle: not FD
95	Gun, including all other projectile weapons
90	Person, other
00	Other object involved
NN	None
UU	Undetermined

Where Injury Occurred - Section J1

1	Enroute to fire department location
2	At fire department location
3	Enroute to incident or assignment
4	Enroute to medical facility
5	At scene, in structure
6	At scene, outside
7	At medical facility
8	Returning from incident or assignment
9	Returning from medical facility
0	Other location
U	Undetermined

Specific Location Where Injury Occurred - Section J3

22	Outside at grade
23	On roof
24	On aerial ladder or in basket
25	On ground ladder
26	On vertical surface or ledge
27	On fire escape or outside stairway
28	On steep grade
31	In open pit
32	In ditch or trench
33	In quarry or mine
34	In ravine
35	In well
36	In water
49	In structure, excluding attic, roof, or wall
45	In attic or other confined structural space
53	In tunnel
54	In sewer
61	In motor vehicle
63	In rail vehicle

64	In boat, ship or barge
65	In aircraft
00	Other specific location
UU	Undetermined
NN	None

Vehicle Type - Section J4

1	Suppression vehicle
2	EMS vehicle
3	Other fire department vehicle
4	Non-fire department vehicle (includes POV)
U	Vehicle type undetermined (Conversion only)
N	None

Equipment Failed - Section K1

Y	Yes
N	No

Protective Equipment Item - Section K2***1 Head or Face Protection***

11	Helmet
12	Full face protector
13	Partial face protector
14	Goggles/eye protection
15	Hood
16	Ear protector
17	Neck protector
10	Head or face protection, other

2 Coat, Shirt or Trousers

21	Protective coat
22	Protective trousers
23	Uniform shirt
24	Uniform T-shirt
25	Uniform trousers
26	Uniform coat or jacket
27	Coveralls
28	Apron or gown
20	Coat, shirt or trousers, other

3 Boots or Shoes

31	Knee length boots w/ steel baseplate & steel toes
32	Knee length boots with steel toes only
33	3/4 length boots w/ steel baseplate & steel toes
34	3/4 length boots with steel toes only

Protective Equipment Item - Section K2 (continued)

35	Boots without steel baseplate or steel toes
36	Safety shoes with steel baseplate and steel toes
37	Safety shoes with steel toes only
38	Non-safety shoes
30	Boots or shoes, other
4	<i>Respiratory Protection</i>
41	Self-contained breathing apparatus (SCBA) demand
42	Self-contained breathing apparatus (SCBA) positive
43	Self-contained breathing apparatus (SCBA) closed
44	Non-self-contained breathing apparatus
45	Cartridge respirator
46	Dust or particle mask
40	Respiratory protection, other
5	<i>Hand Protection</i>
51	Firefighter gloves with wristlets
52	Firefighter gloves without wristlets
53	Work gloves
54	Hazmat gloves
55	Medical gloves
50	Hand protection, other
6	<i>Special Equipment</i>
61	Proximity suit for entry
62	Proximity suit for non-entry
63	Totally encapsulated, reusable chemical suit
64	Totally encapsulated, disposable chemical suit
65	Partially encapsulated, reusable chemical suit
66	Partially encapsulated, disposable chemical suit
67	Flash protection suit
68	Flight or jump suit
69	Brush suit
7	<i>Special Equipment Continued</i>
71	Exposure suit
72	Self-Contained Underwater Breathing Apparatus (SCUBA)
73	Life preserver
74	Life belt or ladder belt
75	Personal alert safety system (PASS)
76	Radio distress device

77	Personal lighting
78	Fire shelter or tent
79	Vehicle safety belt
70	Special equipment, other
00	Other protective equipment item
UU	Undetermined (conversion only)
NN	None (conversion only)

Protective Equipment Problem - Section K3

11	Burned
12	Melted
21	Fractured, cracked or broke
22	Punctured
23	Scratched
24	Knocked off
25	Cut or ripped
31	Trapped steam or hazardous gas
32	Insufficient insulation
33	Object fell in or onto equipment item
41	Failed under impact
42	Face piece or hose detached
43	Exhalation valve inoperative or damaged
44	Harness detached or separated
45	Regulator failed to operate
46	Regulator damaged by contact
47	Problem with admissions valve
48	Alarm failed to operate
49	Alarm damaged by contact
51	Supply cylinder or valve failed to operate
52	Supply cylinder or valve damaged by contact
53	Supply cylinder contained insufficient air
94	Did not fit properly
95	Not properly serviced or stored prior to use
96	Not used for designed purpose
97	Not used as recommended by manufacturer
00	Other problem
UU	Undetermined
NN	None

EMS Module Data Dictionary**Provider Impression Assessment - Section D**

10	Abdominal pain
11	Airway obstruction
12	Allergic reaction, excludes stings & venomous bite
13	Altered level of consciousness
14	Behavioral - mental status, psychiatric disorder
15	Burns
16	Cardiac arrest
17	Cardiac dysrhythmia
18	Chest pain
19	Diabetic symptom
20	Do not resuscitate
21	Electrocution
22	General illness
23	Hemorrhaging/bleeding
24	Hyperthermia
25	Hypothermia
26	Hypovolemia
27	Inhalation injury, toxic gases
28	Obvious death
29	Overdose/poisoning
30	Pregnancy/OB
31	Respiratory arrest
32	Respiratory distress
33	Seizure
34	Sexual assault
35	Sting/bite
36	Stroke/CVA
37	Syncope, fainting
38	Trauma
00	Other impression/assessment
NN	None/no patient or refused treatment

Gender - Section E2

1	Male
2	Female

Race - Section F1

1	White
2	Black
3	American Indian, Eskimo or Aleut
4	Asian
0	Other, includes multi-racial

U Undetermined

Ethnicity - Section F2

1	Hispanic
0	Other

Human Factors Contributing to Injury - Section G1**Please Note:**

The code set table used for this data element is the same set that is used for "Human Factors Contributing to Injury" - section J in the Civilian Fire Casualty Module. Please refer to page 186 for the codes listed for that data element.

Other Factors - Section G2

1	Accidental
2	Self-inflicted
3	Inflicted, not self-inflicted
N	None

Body Site of Injury - Section H1

1	Head
2	Neck & shoulder
3	Thorax, includes chest and back, excludes spine
4	Abdomen
5	Spine
6	Upper extremities
7	Lower extremities
8	Internal
9	Multiple body parts
N	None

Injury Type - Section H2

10	Amputation
11	Blunt Injury
12	Burn
13	Crush
14	Dislocate/fracture
15	Gunshot
16	Laceration
17	Pain without swelling
18	Puncture/stab
19	Soft tissue swelling
00	Other injury type

Cause of Illness/Injury - Section H3

10	Chemical exposure
11	Drug poisoning
12	Fall
13	Aircraft related
14	Bite, includes animal bites
15	Bicycle accident
16	Building collapse/construction accident
17	Drowning
18	Electrical shock
19	Cold
20	Heat
21	Explosives
22	Fire and flames
23	Firearm
25	Fireworks
26	Lightning
27	Machinery
28	Mechanical suffocation
29	Motor vehicle accident
30	Motor vehicle accident, pedestrian
31	Non-traffic vehicle (off-road) accident
32	Physical assault/abuse
33	Scalds/other thermal
34	Smoke inhalation
35	Stabbing assault
36	Venomous sting
37	Water transport
00	Other cause
UU	Unknown

Procedures Used - Section I

01	Airway insertion
02	Anti-shock trousers
03	Assisted ventilation
04	Bleeding control
05	Burn care
06	Cardiac pacing
07	Cardioversion (defib), manual
08	Chest/abdominal thrust
09	CPR
10	Cricothyroidotomy
11	Defibrillation by AED
12	EKG monitoring
13	Extrication
14	Intubation (EGTA)

15	Intubation (ET)
16	IO/IV Therapy
17	Medications therapy
18	Oxygen therapy
19	Obstetrical care/delivery
20	Pre-arrival instructions
21	Restrained patient
22	Spinal immobilization
23	Splinted extremities
24	Suction/aspirate
00	Other procedure
NN	No treatment

Safety Equipment - Section J

1	Safety, seat belts
2	Child safety seat
3	Airbag
4	Helmet
5	Protective clothing
6	Flotation device
N	None
0	Other equipment used
U	Undetermined

Cardiac Arrest - Section K

1	Pre-arrival arrest
2	Post arrival arrest

Pre-Arrival Details - Section K

1	Witnessed
2	Bystander CPR

Initial Arrest Rhythm - Section K

1	V-Fib/V-Tach
0	Initial arrest rhythm, other
U	Undetermined

Initial Level of Provider - Section L1

1	First Responder
2	EMT-B (Basic)
3	EMT-I (Intermediate)
4	EMT-P (Paramedic)
0	Other health care provider
N	No training

Highest Level of Provider on Scene - Section L2

- 1 First Responder
- 2 EMT-B (Basic)
- 3 EMT-I (Intermediate)
- 4 EMT-P (Paramedic)
- 0 Other health care provider
- N No care provided

Patient Status - Section M

- 1 Improved
- 2 Remained Same
- 3 Worsened

Pulse on Transfer - Section M

- 1 Pulse on Transfer
- 2 No Pulse on Transfer

EMS Disposition - Section N

- 1 FD transport to Emergency Care Facility (ECF)
- 2 Non-FD transport
- 3 Non-FD transport with FD attendant
- 4 Non-emergency transfer
- N Not transported under EMS
- 0 Other

HazMat Chemical Database

The HazMat Chemical Database is provided to developers as a means of maintaining consistency with the NFIRS 5.0 standard software and also in order to improve consistency and usability of chemical name information collected in the NFIRS 5.0 HazMat module.

The HazMat Chemical Database consists of many, but not all, of the most commonly released chemicals currently responded to by the nation's fire service. The HazMat Chemical Database was created as a product of the development of the Hazardous Materials Guide for First Responders which, in turn, was developed under the Firefighters' Safety Study Act (*Pub. L. 101-446 - Oct. 22, 1990*). The database is intended to be a living document and will be updated on a regular basis as warranted.

Intended Use By Developers

The Chemical Database contains a Chemical ID Number, which should be used as an internal key uniquely identifying chemicals and their associated trade names. The Chemical ID Number key is designed for internal use by software only and is organized in the following manner:

3. Digits 1 through 4 are the unique identifier for a chemical (ex. Acetal is 0001).
4. Digits 5 through 7 are a unique identifier for synonyms or trade names for that chemical.
5. Zeros (000), in the Trade Name Identifier (positions 5 through 7) indicate a base chemical name (not a trade name).
6. If the Trade Name Identifier is greater than zeros (001-999), the record is a trade name alias for the base chemical.
7. Base chemicals and their associated trade names share a common unique identifier (positions 1-4).

Example:

Acetal has a Chemical ID Number of 0001000. The numbers 0001 in positions 1-4 uniquely identify the chemical as Acetal. The last three digits are zeros so Acetal is the base chemical name. Acetal also has several synonyms. Is it also known as Acetaldehyde ethylacetal, which has a Chemical ID number of 0001001. The first four positions (0001) are the same (indicating it is still Acetal) but the 001 in the last 3 positions indicates that it is the first trade name for Acetal. Acetal has three trade names (001-003) associated with it in the HazMat Chemical Database. They are all the same chemical as the base chemical name Acetal (0001).

Data Entry Guidelines

Chemicals selected from the database by the user must be taken from the HazMat Chemical database table and stored in the Chemical Name field. If a chemical trade name is selected (positions 5-7 greater than zeros) the **base** chemical name (000 record) should be stored in the field. The associated UN Number and CAS number may also be automatically filled from the database when there is a match and those values are present in the record. If the chemical involved is not present in the Chemical Database, the user must be allowed to directly enter the name of the chemical, the UN Number and the CAS Number into the appropriate fields.

This method outlined above allows for uniform spelling and formatting of data when values are present in the database but does not preclude entry of chemical names if they are not present in the database. Using the example above, if there was yet another trade name for Acetal that was not included in the HazMat Chemical Database, the user should be allowed to enter that trade name into the Chemical Name field even though it was not present in the database.

The most current version of the Chemical Database may be obtained from the USFA web site at:

<http://www.usfa.fema.gov/newnfirs/>

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
(Chloromethyl) benzene	0045002	1738	100-44-7	1,3-CPD	0137002	2048	77-73-6
(Diethylamino) ethane	0392001	1296	121-44-8	1,3-Cyclopentadiene dimer	0137003	2048	77-73-6
1-(Chloromethyl)-4-nitrobenzene	0702000			1,3-D	0135001	2047	542-75-6
1-(2-Tolyl) thiourea	0292001		614-78-8	1,3-Dichloro-2-propanone	0127002	2649	534-07-6
1,1,1-Trichloroethane	0389000	2831	71-55-6	1,3-Dichloroacetone	0127000	2649	534-07-6
1,1,2,2-Tetrachloroethane	0374005	1702	79-34-5	1,3-Dichloropropene	0135002	2047	542-75-6
1,1,2-Trichloro-1,2,2-trifluoroethane	1715000			1,3-Dimethylbenzene	0412002	1307	
1,1-DCE	1834000			1,3-Dinitrobenzene	0166002	1597	
1,1-Di(tert-butylperoxy)cyclohexane	0859000	2179		1,3-Pentadiene	0319000		504-60-9
1,1-Dichloroethane	0130000	2362	75-34-3	1,4- Butenediol	0607000		
1,1-Dichloroethylene	0408002	1303	75-35-4	1,4-Benzoquinone	0041001	2587	106-51-4
1,1-Diethoxyethane	0001003	1088	105-57-7	1,4-Butynediol	0072000	2716	110-65-6
1,1-Difluoroethane	0147001	1030	75-37-6	1,4-Cyclohexadiene dioxide	0041003	2587	106-51-4
1,1-Difluoroethylene	0908000	1959		1,4-Dichloro-2-butene	1839003		
1,1-Dimethylethane	0238001	1969	75-28-5	1,4-Dichlorobenzene	0128001	1592	106-46-7
1,1-Dimethylethyl hydroperoxide	0068002		75-91-2	1,4-Dichlorobutene	1839002		
1,1-Dimethylethylamine	0065003	2734	75-64-9	1,4-Dicyanobutane	0015002	2205	111-69-3
1,1-Dimethylhydrazine	0159000	1163	57-14-7	1,4-Diethylenedioxide	0169001	1165	123-91-1
1,1-Oxy-bis-(2-chloroethane)	0129006	1916	111-44-4	1,4-Dihydroxy-2-butyne	0072004	2716	110-65-6
1,2,3,4-Diepoxybutane	0138004		1464-53-5	1,4-Dimethylbenzene	0412003	1307	
1,2,3,5-Tetramethyl benzene	1662000			1,4-Dinitrobenzene	0166003	1597	
1,2,3,7,8-Pentachlorodibenzofurans	1453000			1,4-Dioxane	0169000	1165	123-91-1
1,2,3-Trichloropropane	1712000			1,4-Epoxybutane	0379001	2056	109-99-9
1,2,4-Trichlorobenzene	1701000	2321		1-Acetoxyethylene	0403003	1301	108-05-4
1,2-Butylene oxide	0067000	3022	106-88-7	1-Acetoxypropane	0347002	1276	109-60-4
1,2-DCE	0131002	1150	540-59-0	1-Amino-2,4-dinitrobenzene	0165001	1596	97-02-9
1,2-Diaminoethane	0191002	1604	107-15-3	1-Amino-2-propanol	0243001		78-96-6
1,2-Dibromo-3-chloropropane	0853000	2872		1-Aminobutane	0064001	1125	109-73-9
1,2-Dibromoethane	0192002	1605	106-93-4	1-Bromo-3-methylbutane	0595000	2341	
1,2-Dichloroethane	0193001	1184	107-06-2	1-Bromobutane	0056000	1126	109-65-9
1,2-Dichloroethylene	0131000	1150	540-59-0	1-Bromopropane	0598000		
1,2-Dichloropropane	0351001	1279	78-87-5	1-Butanethiol	0070001	2347	109-79-5
1,2'-Dichlorotriethylamine	0180001	2734	538-07-8	1-Butene oxide	0067001	3022	106-88-7
1,2-Diethoxyethane	0195001	1153	629-14-1	1-Butyl acetate	0061002	1123	123-86-4
1,2-Diethylhydrazine	0145000		1615-80-1	1-Butylene oxide	0067002	3022	106-88-7
1,2-Dimethoxyethane	0150000	2252	110-71-4	1-Chloro-1-propene	0710000		
1,2-Dimethylbenzene	0412001	1307		1-Chloro-2,3-epoxypropane	0172001	2023	106-89-8
1,2-Dinitrobenzene	0166001	1597		1-Chloro-2-cyanoethane	0102001	3276	542-76-7
1,2-Epoxybutane	0067003	3022	106-88-7	1-Chloro-2-nitrobenzene	0097001	1578	
1,2-Epoxyethane	0199004	1040	75-21-8	1-Chloro-4-methylbenzene	0104001	2238	106-43-4
1,2-Epoxypropane	0353002	1280	75-56-9	1-Chlorobutane	0094003	1127	109-69-3
1,2-Ethylene dichloride	0193005	1184	107-06-2	1-Chloropropane	0708000	1278	
1,2-Propanediol-1-methacrylate	0236001		27813-02-1	1-Chloropropylene	0713000		
1,2-Propylenediamine	1537000	2258		1-Decene	0816000		
1,3-Butadiene	0059004	1010	106-99-0	1-Fluoroethene	0407002	1860	75-02-5

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
1-Heptene	0220001	2278	592-76-7	2,4,5-TP (or Silvex)	1691000	2765	
1-Hexanol	1152000	2282		2,4,5-Trichlorophenoxyacetic acid	1707000	2765	
1-Hexene	0222002	2370	592-41-6	2,4,5-Trichlorophenoxyacetic acid, sodium salt	1708000		
1-Isocyanobutane	0069003	2485	111-36-4	2,4,6-Trichlorophenol	1706000	2020	
1-Methoxyethylene	0409002	1087	107-25-5	2,4,6-Trichloro-s-triazine	0113001	2670	108-77-0
1-Methyl ethyl alcohol	0242004	1219	67-63-0	2,4,6-Trimethyl aniline	1737000		
1-Methyl naphthalene	1310000			2,4-D	0122000	2765	94-75-7
1-Methyl pyrrolidone	1327000			2,4-Diaminotoluene	0385002	1709	95-80-7
1-Methyl-1-phenylethene	0244003	2303	98-83-9	2,4-Dichlorophenol	0875000		
1-Methyl-2-aminoethanol	0243003		78-96-6	2,4-Dichlorophenoxyacetic acid	0122002	2765	94-75-7
1-Methylbutadiene	0319001		504-60-9	2,4-Dimethyl phenol	0939000	2261	
1-Methylethylamine	0245002	1221	75-31-0	2,4-Dinitro-1-aminobenzamine	0165002	1596	97-02-9
1-Methylhydrazine	0282002	1244	60-34-4	2,4-Dinitroaniline	0165000	1596	97-02-9
1-Nitropropane	0308001	2608	108-03-2	2,4-Dinitrobenzamine	0165003	1596	97-02-9
1-Octene	0313002		111-66-0	2,4-Dinitro-o-cresol	0167002	1598	534-52-1
1-Pentanol	0032005	1105	71-41-0	2,4-Dinitrophenol	0168004		51-28-5
1-Pentene	1461000	1108		2,4-Dinitrotoluene	0951000	2038	
1-Pentyl alcohol	0032006	1105	71-41-0	2,4-DNP	0168005		51-28-5
1-Phenyl-2-thiourea	0328003	2767	103-85-5	2,4-Pentadione	0320005	2310	123-54-6
1-Phenylpropane	0348002	2364	103-65-1	2,4-TDI	0386002	2078	584-84-9
1-Propanethiol	0342001	2402	107-03-9	2,4-Toluenediamine	0385000	1709	95-80-7
1-Propene	0350004	1077	115-07-1	2,5-Dioxahexane	0150003	2252	110-71-4
1-Propyl acetate	0347003	1276	109-60-4	2,6-Diethyl aniline	0889000		
1-Propylene	0350005	1077	115-07-1	2,6-Xylidine	1784000	1711	
1-Tetradecene	1653000			2-Acetylaminofluorene	0417000		
1-Tridecene	1720000			2-Amino-2-methyl-1-propanol	0444000		
1-Undecene	1761000			2-Aminoethanol	0174001	2491	141-43-5
2-Chloronaphthalene	0703000			2-Aminoisobutane	0065001	2734	75-64-9
2-(2,4,5-Trichlorophenoxy) propanoic acid	1709000	2765		2-Aminopentane	0140001	1154	109-89-7
2-(2-Aminoethoxy)ethanol	0441000	3055		2-Aminopropane	0245001	1221	75-31-0
2,2',2''-Trichlorotriethylamine	0399001		555-77-1	2-Aminopyridine	0023001	2671	
2,2'-Diaminodiethylamine	0143004	2079	111-40-0	2-Bromobutane	0591000	2339	
2,2'-Dichlorodiethyl ether	0129000	1916	111-44-4	2-Bromoethyl ethyl ether	0593000	2340	
2,2-Dichloroisopropyl ether	0872000	2490		2-Bromopentane	0596000		
2,2'-Dichlorotriethylamine	0880000			2-Bromopropane	0057000	2344	75-26-3
2,2-Dimethyl octanoic acid	0938000			2-Butanone	0280001	1193	78-93-3
2,2-Dimethylbutane	0300001	1208	75-83-2	2-Butenal	0106001	1143	4170-30-3
2,2-Dimethylpropane	0942000	2044		2-Butyne-1,4-diol	0072001	2716	110-65-6
2,2-Dimethylpropane-1,3-diol	0943000			2-Butynediol	0072002	2716	110-65-6
2,3,7,8-Tetrachlorodibenzofurans	1649000			2-Chloro-1,3-butadiene	0100003	1991	126-99-8
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1650000	2378		2-Chloro-1-ethanol	0189002	1135	107-07-3
2,3-Butylene oxide	0618000			2-Chloroacetaldehyde	0090001	2232	107-20-0
2,3-Dichloropropene	0877000	2047		2-Chloroacrylic acid, methyl ester	0275001		80-63-7
2,3-Dihydropyran	0912000	2376		2-Chlorobuta-1,3-diene	0100004	1991	126-99-8
				2-Chlorobutane	0693000	1127	

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
2-Chloroethane sulfonyl chloride	0697000			2-Methyl-1-nitroanthraquinone	1312000		
2-Chloroethanol	0189001	1135	107-07-3	2-Methyl-1-pentene	1317000		
2-Chloroethyl chlorocarbonate	0095001	2742	627-11-2	2-Methyl-2-butene	1282000	2460	
2-Chloroethyl vinyl ether	0698000			2-Methyl-2-hydroxy-3-butyne	1305000		
2-Chlorophenylthiourea	0098000		5344-82-1	2-Methyl-2-pentene	1318000		
2-Chloropropane	0709000	2356		2-Methyl-2-propenoic acid	0255003	2531	79-41-4
2-Chloropropene	0711000	2456		2-Methyl-4-pentanone	0285003	1245	108-10-1
2-Chloropropionic acid	0101001	2511	598-78-7	2-Methyl-5-vinyl pyridine (MVP)	1331000	3073	
2-Cyano-2-propanol	0005001	1541	75-86-5	2-Methyl-6-ethyl aniline	1298000		
2-Cyanoethyl alcohol	0190001		109-78-4	2-Methylacrylic acid, methyl ester	0290002	1247	80-62-6
2-Cyanohydrin	0190002		109-78-4	2-Methylbutadiene	0241003	1218	78-79-5
2-Cyanopropane	0240001	2284	78-82-0	2-Methylpropane	0238002	1969	75-28-5
2-Cyanpropene	0264001	3079	126-98-7	2-Methylpropene	0239001	1055	115-11-7
2-Diethylaminoethanol	0141002	2686	100-37-8	2-Methylpropenenitrile	0264003	3079	126-98-7
2-Dimethylaminoethanol	0930000	2051		2-Nitrophenol	1399000	1663	
2-Ethoxyethanol	0196001	1171	110-80-5	2-Nitropropane	0308002	2608	79-46-9
2-Ethoxyethyl ethyl ether	0195004	1153	629-14-1	2-Nitrotoluene	0310002	1664	
2-Ethyl hexanoic acid	1052000			2-Oxetanone	0344002	1993	57-57-8
2-Ethyl hexanol	1053000			2-Pentene	1462000		
2-Ethyl hexylamine	1054000	2276		2-Phenyloxirane	0363002		96-09-3
2-Ethyl toluene	1071000			2-Phenylpropane	0246003	1918	98-82-8
2-Ethyl-3-propyl acrolein	1065000			2-Phenylpropylene	0244004	2303	98-83-9
2-Fluoroacetic acid	0208002	2642	144-49-0	2-Propanol	0242005	1219	67-63-0
2-Fluoroaniline	1096000	2941		2-Propanone	0004003	1090	67-64-1
2-Fluoroethanol	0194001		371-62-0	2-Propen-1-amine	0018005	2334	107-11-9
2-Formylfuran	0216001	1199	98-01-1	2-Propenal	0010004	1092	79-06-1
2-Furaldehyde	0216003	1199	98-01-1	2-Propenamine	0018004	2334	107-11-9
2-Furfural	0216004	1199	98-01-1	2-Propenenitrile	0013004	1093	107-13-1
2-H-1,4-oxazine	0298003	2054	110-91-8	2-Propenoic acid	0012007	2218	79-10-7
2-Heptanone	0267003	1110	110-43-0	2-Propenol	0017006	1098	107-18-6
2-Hexanone	0271001	1224	591-78-6	2-Propenyl bromide	0019004	1099	106-95-6
2-Hexene	1153000			2-Propenyl chloroformate	0021002	1722	2937-50-0
2-Hydroperoxy-2-methylpropene	0068003		75-91-2	2-Propyl chloroformate	0247003	2407	108-23-6
2-Hydroxyethyl acrylate	1160000			2-Propylamine	0245003	1221	75-31-0
2-Hydroxyisobutyronitrile	0005002	1541	75-86-5	2-Propynol	0343003	1986	107-19-7
2-Hydroxypropionitrile	0250003	3275	78-97-7	2-Pyrrolidone	1551000		
2-Hydroxypropylamine	0243002		78-96-6	2-Thiopropene	0163004	1164	75-18-3
2-Hydroxytriethylamine	0141004	2686	100-37-8	2-Thiourea	0382003		62-56-6
2-Isopropylcyanohydrin	0005004	1541	75-86-5	3-(1-Methyl ethyl) phenyl methyl carbamate	1299000		
2-Methoxy-2-methylpropane	0270002	2398	1634-04-4	3,3'-Dichlorobenzidine	0869000		
2-Methoxyethanol	0197005	1188	109-86-4	3,3'-Diethylthiadicarbocyanine iodide	0171002		514-73-8
2-Methyl lactonitrile	0005005	1541	75-86-5	3-Aminopropene	0018001	2334	107-11-9
2-Methyl-1,3-butadiene	0241002	1218	78-79-5	3-Aminopropylene	0018002	2334	107-11-9
2-Methyl-1-butene	1281000	2459		3-Aminopyridine	0023002	2671	
2-Methyl-1-butenone	0287003	1246	814-78-8	3-Bromo-1-propene	0019002	1099	106-95-6

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
3-Bromopropylene	0019003	1099	106-95-6	4-Methyl-1-pentene	0291000	2288	691-37-2
3-Bromopropyne	0058000	2345	106-96-7	4-Methyl-2-pentanol	0284004	2053	108-11-2
3-Buten-2-one	0297001	1251	78-94-4	4-Methyl-2-pentene	1319000		
3-Buteno-beta-lactone	0149002	2521	674-82-8	4-Methyl-3-penten-2-one	1841004	1229	141-79-7
3-Chloropropanenitrile	0102002	3276	542-76-7	4-Methylene	0149004	2521	674-82-8
3-Chloropropene	0020003	1100	107-05-1	4-Nitroaniline	1380000	1661	
3-Chloropropionitrile	0102000	3276	542-76-7	4-Nitrobiphenyl	1382000		
3-Chloropropyl octyl sulfoxide	0714000			4-Nitrophenol	1401000	1663	
3-Chlorotoluene	0716000	2238		4-Nitropyridine-1-oxide	1402000		
3-Hexene	1154000			4-Nitrotoluene	0310004	1664	
3-Hydroxy-1-propyne	0343002	1986	107-19-7	4-Pyridinamine	0023009	2671	
3-Hydroxypropionitrile	0190005		109-78-4	4-Pyridylamine	0023010	2671	
3-Methoxybutyl acetate	1267000			4-Thiapentanal	1674000	2785	
3-Methyl nitrosoaminopropionitrile	1313000			5-Nitroacenaphthene	1379000		
3-Methyl-1-butene	1283000	2561		5-Nitro-o-anisidine	1381000		
3-Methyl-2-butanone	0269000	2397	563-80-4	7H- Dibenzo (C,G) carbazole	0850000		
3-Methyl-3-butene-2-one	0287002	1246	814-78-8	A-150	0411001	1305	75-94-5
3-Methylbut-2-one	0269002	2397	563-80-4	AA	0017002	1098	107-18-6
3-MIC	0284006	2053	108-11-2	Acetal	0001000	1088	105-57-7
3-Nitrophenol	1400000	1663		Acetaldehyde	0002000	1089	75-07-0
3-Nitrotoluene	0310003	1664		Acetaldehyde cyanohydrin	0250001	3275	78-97-7
3-Nitrotoluol	0310007	1664		Acetaldehyde ethylacetal	0001001	1088	105-57-7
3-Pentanone	0146005	1156	96-22-0	Acetamide	0414000		
3-Propanolide	0344003	1993	57-57-8	Acetene	0188001	1038	74-85-1
3-Trifluoromethylaniline	1731000	2948		Acetic acid (More than 80%)	1840000	2789	64-19-7
4,4'-DDT	0811000	2761		Acetic acid (Solution in Water 1-80%)	1840000	2790	64-19-7
4,4'-Diaminodiphenyl ether	0832000			Acetic acid anhydride	0003001	1715	108-24-7
4,4'-Isopropylidenediphenol	1186000			Acetic acid bromide	0007001	1716	506-96-7
4,4'-Methylene bis-(2-chloroaniline)	1292000			Acetic acid chloride	0008001	1717	75-36-5
4,4'-Methylene bis-(2-methylaniline)	1293000			Acetic acid, dimethylamide	0151001		127-19-5
4,4'-Methylene dianiline	1295000			Acetic acid, ethinyl ester	0403001	1301	108-05-4
4,4'-Thiodianiline	1679000			Acetic acid, methyl ester	0261001	1231	79-20-9
4,6-Dinitro-o-cyclohexyl phenol	0950000	9026		Acetic acid, n-butyl ester	0061001	1123	123-86-4
4-Aminoazobenzene	0439000			Acetic acid, n-propyl ester	0347001	1276	109-60-4
4-Aminobutyl diethoxymethyl silane	0440000			Acetic acid, vinyl ester	0403002	1301	108-05-4
4-Amino-N,N-dimethylaniline	0160001		99-98-9	Acetic aldehyde	0002001	1089	75-07-0
4-Aminopropiophenone	0445000			Acetic anhydride	0003000	1715	108-24-7
4-Aminopyridine	0023003	2671		Acetic chloride	0008002	1717	75-36-5
4-Bromophenyl phenyl ether	0597000			Acetic ester	0175001	1173	141-78-6
4-Chloro-1-methylbenzene	0104002	2238	106-43-4	Acetic ether	0175002	1173	141-78-6
4-Chlorophenyl phenyl ether	0705000			Acetoacetone	0320001	2310	123-54-6
4-Chlorotoluene	0104003	2238	106-43-4	Acetocyanohydrin	1819000		
4-Dimethyl aminoazobenzene	0929000			Acetol	0001002	1088	105-57-7
4-Fluoroaniline	1097000	2941		Acetone	0004000	1090	67-64-1
4-Fluorotoluene	1098000	2388		Acetone cyanohydrin	0005000	1541	67-64-1

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Acetone thiosemicarbazide	0415000			Allethrin	0425000	2902	
Acetonitrile	0006000	1648	75-05-8	Allyl acetate	0426000	2333	
Acetophenone	0416000			Allyl alcohol	0017000	1098	107-18-6
Acetyl acetone	0320002	2310	123-54-6	Allyl aldehyde	0010002	1092	79-06-1
Acetyl anhydride	0003002	1715	108-24-7	Allyl bromide	0019000	1099	106-95-6
Acetyl bromide	0007000	1716	506-96-7	Allyl chloride	0020000	1100	107-05-1
Acetyl chloride	0008000	1717	75-36-5	Allyl chlorocarbonate	0021001	1722	2937-50-0
Acetyl ether	0003003	1715	108-24-7	Allyl chloroformate	0021000	1722	2937-50-0
Acetyl ketene	0149001	2521	674-82-8	Allyl ether	0427000		
Acetyl oxide	0003004	1715	108-24-7	Allyl ethyl ether	0428000	2335	
Acetyl peroxide solution	0418000	2084		Allyl iodide	0429000	1723	
Acetylene	0009000	1001	74-86-2	Allyl isothiocyanate	0430000	1545	
Acetylene dichloride	0131001	1150	540-59-0	Allylal	0017001	1098	107-18-6
Acetylene tetrachloride	0374001	1702	79-34-5	Allylamine	0018000	2334	107-11-9
Acetylene trichloride	0390001	1710	79-01-6	Allylic alcohol	0017003	1098	107-18-6
Acetylenogen	0076001	1402	75-20-7	Allyltrichlorosilane	0022000	1724	107-37-9
Acetylsilicon trichloride	0022001	1724	107-37-9	alpha-Bromotoluene	0044001	1737	100-39-0
Acridine	0419000	2713		alpha-Chlorobenzaldehyde	0043002	1736	98-88-4
Acroleic acid	0012001	2218	79-10-7	alpha-Chloropropionic acid	0101000	2511	598-78-7
Acrolein	0010000	1092	79-06-1	alpha-Chlorotoluene	0045001	1738	100-44-7
Acryldehyde	0010001	1092	79-06-1	alpha-Cumene hydroperoxide	0107001	2116	80-15-9
Acrylamide	0011000	2074	79-06-1	alpha-Endosulfan	0992000		
Acrylic acid	0012000	2218	79-10-7	alpha-Methacrylic acid	0255002	2531	79-41-4
Acrylic acid, butyl ester	0062001	2348	141-32-2	alpha-Methylacrylic acid	0255001	2531	79-41-4
Acrylic acid, chloride	0014001	9188	814-68-6	alpha-Methyl benzyl alcohol	1247000		
Acrylic acid, ethyl ester	0176001	1917	140-88-5	alpha-Methyl benzyl alcohol	1280000	2937	
Acrylic acid, methyl ester	0263001	1919	96-33-3	alpha-Methyl styrene	0244002	2303	98-83-9
Acrylic amide	0011001	2074	79-06-1	alpha-Naphthyl amine	1323000		
Acrylonitrile	0013000	1093	107-13-1	alpha-Naphthyl amine	1355000	2077	
Acryloyl chloride	0014000	9188	814-68-6	alpha-Pinene	0337000	2368	80-56-8
Acrylyl chloride	0014002	9188	814-68-6	alpha-Tolunitrile	0324001	2470	140-29-4
Actidione	0117001		66-81-9	Aluminum (dust)	0431000	1396	
Actidone	0117002		66-81-9	Aluminum borohydride	0432000	2870	
Adipic acid	0420000			Aluminum chloride	0433000	1726	
Adipic acid dinitrile	0015001	2205	111-69-3	Aluminum fluoride	0434000		
Adiponitrile	0015000	2205	111-69-3	Aluminum nitrate	0435000	1438	
Alachlor	0421000			Aluminum oxide	0436000		
Alcide	0088001	9191	10049-04-4	Aluminum phosphide	0437000	1397	
Aldicarb	0016000	2757	116-06-3	Aluminum sulfate	0438000		
Aldifen	0168003		51-28-5	Aluminum, triisobutyl	0395001		100-99-2
Aldrin	0422000	2761		AMFO	0034001	0331	
Algrain	0177001	1170	64-17-5	AM-FOL	0024001	1005	7664-41-7
Alkyl benzene sulfonic acids	0423000			Aminic acid	0214001	1779	64-18-6
Allene	0424000	2200		Aminobenzene	0035002	1547	62-53-3
Allene-methyl acetylene mixture	0262001	1060		Aminocyclohexane	0118001	2357	108-91-8

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Aminoethane	0178001	1036	75-04-7	Ammonium nitrate-phosphate mixture	0472000	2070	
Aminoethyl ethanol amine	0442000			Ammonium nitrate-sulfate mixture	0473000	2069	
Aminoethylethandiamine	0143001	2079	111-40-0	Ammonium nitrate-urea solution	0474000		
Aminohexahydrobenzene	0118002	2357	108-91-8	Ammonium oleate	0475000		
Aminomethane	1831000			Ammonium oxalate	0476000	2449	
Aminophen	0035001	1547	62-53-3	Ammonium pentaborate	0477000		
Aminopyridine	0023000	2671		Ammonium perchlorate	0028000	1442	7790-98-9
Aminotoluene	0387001	1708		Ammonium perchlorate high explosive	0028001	1442	7790-98-9
Amiton	0446000	3017		Ammonium perchlorate oxidizer	0028002	1442	7790-98-9
Amiton oxalate	0447000			Ammonium permanganate	0478000	9190	
Amitrole	0448000			Ammonium persulfate	0479000	1444	
Ammonia	0024000	1005	7664-41-7	Ammonium phosphate	0480000		
Ammonia monohydrate	0027001		1336-21-6	Ammonium picrate(wet)	0481000	1310	
Ammonia solution	0027002		1336-21-6	Ammonium rhodanate	0031000	9092	1762-95-4
Ammonia water	0027003		1336-21-6	Ammonium silicofluoride	0482000	2854	
Ammonia, anhydrous	0024002	1005	7664-41-7	Ammonium stearate	0483000		
Ammonium acetate	0449000			Ammonium sulfamate	0484000	9089	
Ammonium aminoformate	0026001	9083	1111-78-0	Ammonium sulfate	0485000		
Ammonium benzoate	0025000	9080	1863-63-4	Ammonium sulfide	0029000	2683	12135-76-1
Ammonium bicarbonate	0452000			Ammonium sulfite	0030000	9090	10196-04-0
Ammonium bifluoride	0453000	1727		Ammonium sulfocyanide	0031001	9092	1762-95-4
Ammonium bisulfite	0454000	2693		Ammonium tartrate	0486000	9091	
Ammonium bromide	0455000			Ammonium thiocyanate	0031002	9092	1762-95-4
Ammonium carbamate	0026000	9083	1111-78-0	Ammonium thiosulfate	0487000	9093	
Ammonium carbonate	0456000	9084		AMS	0244001	2303	98-83-9
Ammonium chloride	0457000	9085		Anthio	0031003	9092	1762-95-4
Ammonium chromate	0458000	9086		Amyl alcohol	0032000	1105	71-41-0
Ammonium citrate	0459000	9087		Amyl methyl ketone	0267001	1110	110-43-0
Ammonium dichromate	0460000	1439		Amyl phthalate	0494000		
Ammonium fluoborate	0461000	9088		Amylol	0032002	1105	71-41-0
Ammonium fluoride	0462000	2505		Amyltrichlorosilane	0033000	1728	107-72-2
Ammonium formate	0463000			AN/FO	0034000	0331	
Ammonium gluconate	0464000			Anhydrol	0177002	1170	64-17-5
Ammonium hydroxide	0027000	2672	1336-21-6	Anhydrous ammonia	0024003	1005	7664-41-7
Ammonium hydroxide(10-35% in water)	0027004	2672	1336-21-6	Anhydrous ethanol	0177003	1170	64-17-5
Ammonium hydroxide(35-50% in water)	0027005	2073	1336-21-6	Anhydrous hydrobromic acid	0228001	1048	10035-10-6
Ammonium hypophosphite	0465000			Anhydrous hydrofluoric acid	0231001	1052	7664-39-3
Ammonium iodide	0466000			Aniline	0035000	1547	62-53-3
Ammonium lactate	0467000			Aniline oil	0035003	1547	62-53-3
Ammonium lauryl sulfate	0468000			Anisole	0498000	2222	
Ammonium molybdate	0469000			Anisoyl chloride	0499000	1729	
Ammonium monosulfide	0029001	2683	12135-76-1	Anone	0116001	1915	108-94-1
Ammonium nitrate	0470000	1942		Ansul ether 121	0150001	2252	110-71-4
Ammonium nitrate fertilizers	0471000	2072		Anthion	0340001	1492	7727-21-1
Ammonium nitrate:fuel oil	0034002	0331		Anthracene	0500000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Antimony pentachloride	0502000	1730		Barium carbonate	0525000	1564	
Antimony pentafluoride	0503000	1732		Barium chlorate	0533000	1445	
Antimony potassium tartrate	0504000	1551		Barium cyanide	0534000	1565	
Antimony tribromide	0505000	1549		Barium nitrate	0535000	1446	
Antimony trichloride	0506000	1733		Barium perchlorate	0536000	1447	
Antimony trifluoride	0507000	1549		Barium permanganate	0537000	1448	
Antimony trioxide	0508000			Barium peroxide	0538000	1449	
Antimony(powder)	0501000	2871		BCME	0133001	2249	542-88-1
ANTU	0509000	1651		BD	0059001	1010	106-99-0
Aqua fortis	0302002		7697-37-2	Benomyl	0539000		
Aqueous ammonia	0027006		1336-21-6	Bentazon	0540000		
Aramite	0510000			Benzal chloride	0047001	1886	98-87-3
Arctic	0273001	1063	74-87-3	Benzaldehyde	1838000	1989	100-52-7
Argon	0511000	1006		Benzaldehyde	1838001	1990	100-52-7
Arsenic	0512000	1558		Benzamide	0038000		
Arsenic acid	0513000	1561		Benzenamine	0035004	1547	62-53-3
Arsenic butter	0036001	1560	7784-34-1	Benzene	0039000	1114	71-43-2
Arsenic chloride	0036002	1560	7784-34-1	Benzene arsonic acid	0541000		
Arsenic dichloroethane	0186001	1892	598-14-1	Benzene chloride	0093001	1134	108-90-7
Arsenic disulfide	0514000	1557		Benzene fluoride	0209001	2387	462-06-6
Arsenic hydride	0037001	2188	7784-42-1	Benzene hexachloride	0542000	2729	
Arsenic pentoxide	0515000	1559		Benzene methylal	1838003		100-52-7
Arsenic trichloride	0036000	1560	7784-34-1	Benzene nitro	1842001	1662	98-95-3
Arsenic trihydride	0037002	2188	7784-42-1	Benzene phosphorous dichloride	0327001	2798	644-97-3
Arsenic trioxide	0516000	1561		Benzene sulfonyl chloride	0543000	2225	
Arsenic trisulfide	0517000	1557		Benzenecetonitrile	0324002	2470	140-29-4
Arsenous chloride	0036003	1560	7784-34-1	Benzenecarbonal	1838002		100-52-7
Arsenous trichloride	0036004	1560	7784-34-1	Benzenecarbonyl chloride	0043001	1736	98-88-4
Arsine	0037000	2188	7784-42-1	Benzenhexahydride	0115001	1145	108-94-1
Asbestos	0518000	2212		Benzenenitrile	0040001	2224	100-47-0
Asphalt	0519000	1999		Benzenethiol	0326001	2337	108-98-5
Asphalt blending stocks: roofers flux	0520000	1999		Benzenol	0323003		108-95-2
Asphalt blending stocks: straight run residue	0521000	1999		Benzidine	0544000	1885	
asym-Dimethylhydrazine	0159001	1163	57-14-7	Benzin	0299001		8030-30-6
Atrazine	0522000			Benzo (A) anthracene	0545000		
Auramine	0523000			Benzo (A) pyrene	0546000		
Avitrol	0023007	2671		Benzo (B) fluoranthene	0547000		
Azabenzene	0354001	1282	110-86-1	Benzo (GHI) perylene	0548000		
Azacyclohexane	0338001	2401	110-89-4	Benzoic acid	0549000		
Azacyclopropane	0198001	1185	151-56-4	Benzoic acid amide	0038001		
Azide	0357001	1687	26628-22-8	Benzoic aldehyde	1838004		100-52-7
Azine	0354002	1282	110-86-1	Benzoic trichloride	0042001	2226	98-07-7
Azirane	0198002	1185	151-56-4	Benzol	0039001	1114	71-43-2
Aziridine	0198003	1185	151-56-4	Benzonitrile	0040000	2224	100-47-0
Barium	0524000	1400		Benzophenone	0550000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Benzoquinone	0041000	2587	106-51-4	Bimethyl	0173002		74-84-0
Benzotrichloride	0042000	2226	98-07-7	Biocide	0010003	1092	79-06-1
Benzoyl chloride	0043000	1736	98-88-4	Biogas	0257002		74-82-8
Benzoyl peroxide	0551000	2085		Bioxirane	0138001		1464-53-5
Benzoylamide	0038002			Biphenyl	0571000		
Benzyl acetate	0552000			Bis(2-aminoethyl)amine	0143002	2079	111-40-0
Benzyl alcohol	0553000			Bis-(2-chloro-1-methyl ethyl) ether	0574000	2490	
Benzyl amine	0554000			Bis-(2-chloroethoxy) methane	0572000		
Benzyl bromide	0044000	1737	100-39-0	Bis-(2-chloroethyl) ether	0129001	1916	111-44-4
Benzyl carbonyl chloride	0046001	1739	501-53-1	Bis-(2-chloroisopropyl) ether	0573000	2490	
Benzyl chloride	0045000	1738	100-44-7	Bis-(2-ethyl hexyl) adipate	0575000		
Benzyl chlorocarbonate	0046002	1739	501-53-1	Bis-(2-ethyl hexyl) phthalate	0576000		
Benzyl chloroformate	0046000	1739	501-53-1	Bis(chloromethyl) ether	0133002	2249	542-88-1
Benzyl cyanide	0324003	2470	140-29-4	Bis-(chloromethyl)ketone	0127001	2649	534-07-6
Benzyl dichloride	0047002	1886	98-87-3	Bismuth oxychloride	0577000		
Benzyl dimethyl amine	0555000	2619		Bis-O,O-diethylpyrophosphoric anhydride	0377002		107-49-3
Benzyl dimethyl octadecyl ammonium chloride	0556000			Bisphenol A	0578000		
Benzyl ether	0124001		103-50-4	Bisphenol A diglycidyl ether	0579000		
Benzyl iodide	0557000	2653		Bisulfite	0367001	1079	7446-09-5
Benzyl nitrile	0324004	2470	140-29-4	Bithionol	0580000		
Benzyl oxide	0124002		103-50-4	Bitoscanate	0581000		
Benzyl trichloride	0042003	2226	98-07-7	Bivinyll	0059003	1010	106-99-0
Benzyl trimethyl ammonium chloride	0558000			B-K Liquid	0360001	1791	7681-52-9
Benzyl violet	0559000			Blasting oil	0306002	0143	55-63-0
Benzylene chloride	0047003	1886	98-87-3	Bleach	0360002	1791	7681-52-9
Benzylidene chloride	0047000	1886	98-87-3	Blue oil	0035005	1547	62-53-3
Beryllium	0560000	1567		Bolero	0582000		
Beryllium chloride	0561000	1566		Bondolane A	0364001		126-33-0
Beryllium fluoride	0562000	1566		Bonoform	0374002	1702	79-34-5
Beryllium nitrate	0563000	2464		Boric acid	0583000		
Beryllium oxide	0564000	1566		Borneol	0584000	1312	
Beryllium sulfate	0565000	1566		Boroethane	0125001	1911	19287-45-7
beta-Butyrolactone	0606000			Boron bromide	0048001	2692	10294-33-4
beta-Chloroprene	0100001	1991	126-99-8	Boron chloride	0049001	1741	10294-34-5
beta-Endosulfan	0993000			Boron fluoride	0050001	1008	7637-07-2
beta-Methyl acrolein	0106006	1143	4170-30-3	Boron hydride	1820000		
beta-Propiolactone	0344004	1993	57-57-8	Boron tribromide	0048000	2692	10294-33-4
BHA	0566000			Boron trichloride	0049000	1741	10294-34-5
BHC, alpha-	0567000			Boron trifluoride	0050000	1008	7637-07-2
BHC, beta-	0568000			Boron trifluoride; dimethyl etherate	0585000	2965	
BHC, delta-	0569000			Bottled gas	0252001	1075	68476-85-7
BHC, gamma-	0570000			BPL	0344001	1993	57-57-8
BIC	0069001	2485	111-36-4	Brimstone	0365002	1350	7704-34-9
Bicyclopentadiene	0137001	2048	77-73-6	Brom	0051001	1744	7726-95-6
Biethylene	0059002	1010	106-99-0	Bromacil	0586000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Bromadiolone	0587000			Butyl bromide	0056001	1126	109-65-9
Bromide fluoride	0052001	1745	7789-30-2	Butyl butyrate	0615000		
Bromine	0051000	1744	7726-95-6	Butyl chloride	0094001	1127	109-69-3
Bromine chloride	0588000	2901		Butyl ethanoate	0061003	1123	123-86-4
Bromine cyanide	0110000	1889	506-68-3	Butyl ether	0619000	1149	
Bromine fluoride	0053001	1746	7787-71-5	Butyl ethylene	0222001	2370	592-41-6
Bromine pentafluoride	0052000	1745	7789-30-2	Butyl isocyanate	0069002	2485	111-36-4
Bromine trifluoride	0053000	1746	7787-71-5	Butyl isovalerate	0621000		
Bromoacetic acid	0589000	1938		Butyl mercaptan	0070000	2347	109-79-5
Bromoacetone	0590000	1569		Butyl methyl ether	0623000	2350	
Bromoacetyl bromide	0054000	2513	598-21-0	Butyl nitrite	0624000	2351	
Bromoallylene	0019001	1099	106-95-6	Butyl toluene	0629000	2667	
Bromobenzene	0055000	2514	108-86-1	Butyl, decyl, cetyl-eicosyl methacrylate	0617000		
Bromochloromethane	0592000	1887		Butyl-2-propenoate	0062003	2348	141-32-2
Bromocyan	0110001	1889	506-68-3	Butylacetone	0267002	1110	110-43-0
Bromoethanoyl bromide	0054001	2513	598-21-0	Butylamine	0064002	1125	109-73-9
Bromoethene	0404001	1085	593-60-2	Butylated hydroxyanisole	0613000		
Bromoethylene	0404002	1085	593-60-2	Butylene	0066000	1012	25167-67-3
Bromoform	0594000	2515		Butylethylamine	0181001	2734	13360-63-9
Bromofume	0192001	1605	106-93-4	Butylsilicon trichloride	0071001	1747	7521-80-4
Brom-o-gas	0268001	1062	74-83-9	Butyltrichlorosilane	0071000	1747	7521-80-4
Bromomethane	0268002	1062	74-83-9	Butynediol	0072003	2716	110-65-6
Bromophenylmethane	0044002	1737	100-39-0	Butyral	0073005	1129	123-72-8
Bromopropyne	0058001	2345	106-96-7	Butyraldehyde	0073002	1129	123-72-8
Bromotrifluoroethylene	0599000	2419		Butyric acid	0630000		
Bromotrifluoromethane	0600000	1009		Butyric acid chloride	0075002	2353	141-75-3
Brucine	0601000	1570		Butyric acid nitrile	0074002	2411	109-74-0
Butadiene	0059000	1010	106-99-0	Butyric acid, ethyl ester	0182001	1180	105-54-4
Butadiene diepoxide	0138002		1464-53-5	Butyric acid, methyl ester	0272001	1237	623-42-7
Butadiene dioxide	0138003		1464-53-5	Butyric chloride	0075003	2353	141-75-3
Butal	0073001	1129	123-72-8	Butyronitrile	0074000	2411	109-74-0
Butaldehyde	0073000	1129	123-72-8	Butyryl chloride	0075000	2353	141-75-3
Butanal	0073003	1129	123-72-8	BZCF	0046003	1739	501-53-1
Butane	0060000	1011	106-97-8	C.I. acid Blue 9, diammonium salt	0734000		
Butane nitrile	0074001	2411	109-74-0	C.I. acid blue 9, disodium salt	0735000		
Butanedione	0602000	2346		C.I. acid green 3	0736000		
Butanethiol	0070002	2347	109-79-5	C.I. basic green 4	0737000		
Butanoyl chloride	0075001	2353	141-75-3	C.I. basic red 1	0738000		
Butene	0066001	1012	25167-67-3	C.I. disperse yellow 3	0739000		
Butyl acetic acid	0077001	2829	142-62-1	C.I. food red 15	0741000		
Butyl acid phosphate	0608000	1718		C.I. food red 5	0740000		
Butyl acrylate	0062000	2348	141-32-2	C.I. solvent orange 7	0742000		
Butyl alcohol	0063002	1120	75-65-0	C.I. solvent yellow 14	0744000		
Butyl aldehyde	0073004	1129	123-72-8	C.I. solvent yellow 3	0743000		
Butyl benzyl phthalate	0614000			C.I. vat yellow 4	0747000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Cacodylic acid	0633000	1572		Carbamiotin	0078004		51-83-2
Cadmium acetate	0635000			Carbamoyl dimethyl chloride	0154001	2262	79-44-7
Cadmium bromide	0636000			Carbamyl	0016001	2757	116-06-3
Cadmium chloride	0637000			Carbaryl(solid)	0674000	2757	
Cadmium fluoroborate	0638000			Carbide	0076003	1402	75-20-7
Cadmium nitrate	0639000			Carbinol	0260001	1230	67-56-1
Cadmium oxide	0640000			Carbofuran	0079000	2757	1563-66-2
Cadmium stearate	0641000			Carbolic acid	0323004		108-95-2
Cadmium sulfate	0642000			Carbolic oil	0675000	2821	
Cadmium (powder)	0634000			Carbon bisulfide	0081001	1131	75-15-0
CADOXTBH	0068001		75-91-2	Carbon bisulphide	0081002	1131	75-15-0
Calcium	0643000	1401		Carbon chloride	0083002	1846	56-23-5
Calcium acetylide	0076002	1402	75-20-7	Carbon dichloride oxide	0329001	1076	75-44-5
Calcium arsenite	0644000	1574		Carbon difluoride oxide	0084002	2414	353-50-4
Calcium carbide	0076000	1402	75-20-7	Carbon dioxide	0080000	1013	124-38-9
Calcium chlorate	0645000	1452		Carbon disulfide	0081000	1131	75-15-0
Calcium chloride	0646000			Carbon monoxide	0082000	1016	630-08-0
Calcium chromate	0657000	9096		Carbon nitride	0109001	1026	460-19-5
Calcium cyanide	0658000	1575		Carbon oxide	0082002	1016	630-08-0
Calcium fluoride	0659000			Carbon oxide sulfide	0085001	2204	463-58-1
Calcium hydride	0660000	1404		Carbon oxychloride	0329002	1076	75-44-5
Calcium hydroxide	0661000			Carbon oxyfluoride	0084003	2414	353-50-4
Calcium hypochlorite	0662000	1748		Carbon oxysulfide	0085002	2204	463-58-1
Calcium nitrate	0663000	1454		Carbon sulfide	0081003	1131	75-15-0
Calcium oxide	0664000	1910		Carbon tet	0083003	1846	56-23-5
Calcium peroxide	0665000	1457		Carbon tetrachloride	0083000	1846	56-23-5
Calcium phosphate	0666000			Carbona	0083001	1846	56-23-5
Calcium phosphide	0667000	1360		Carbonic acid anhydride	0080001	1013	124-38-9
Calcium resinate	0668000			Carbonic acid gas	0080002	1013	124-38-9
Camphene	0669000	9011		Carbonic acid, diethyl ester	0142001	2366	105-58-8
Camphor oil	0670000	1130		Carbonic anhydride	0080003	1013	124-38-9
Cantharidin	0671000			Carbonic difluoride	0084001	2414	353-50-4
Caproic acid	0077000	2829	142-62-1	Carbonic ether	0142002	2366	105-58-8
Caprolactam	0672000			Carbonic oxide	0082001	1016	630-08-0
Capronic acid	0077002	2829	142-62-1	Carbonochloride acid, ethyl ester	0185001	1182	541-41-3
Caprylene	0313001		111-66-0	Carbonyl chloride	0329003	1076	75-44-5
Capsine	0167001	1598	534-52-1	Carbonyl fluoride	0084000	2414	353-50-4
Captan	0673000	9099		Carbonyl sulfide	0085000	2204	463-58-1
Carbachol	0078001		51-83-2	Carene	0676000		
Carbachol chloride	0078000		51-83-2	Casing head gasoline	0217001	1203	8006-61-9
Carbacholin	0078002		51-83-2	Caswell No.805	0361001	1692	57-24-9
Carbacholine dichloride	0078003		51-83-2	Catechol	0677000		
Carbacryl	0013001	1093	107-13-1	Caustic potash solution	0647000	1814	
Carbamic acid, ammonium salt	0026002	9083	1111-78-0	Caustic soda	0359002		1310-73-2
Carbamide peroxide	0401001	1511	124-43-6	Caustic soda, solution	0359003		1310-73-2

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Cellon	0374003	1702	79-34-5	Chlorocyan	0111002	1589	506-78-5
Certox	0361002	1692	57-24-9	Chlorocyanogen	0111003	1589	506-78-5
Cesium	0678000	1407		Chlorodibromomethane	0695000		
CHA	0118003	2357	108-91-8	Chlorodifluoromethane	0696000	1018	
Chloral	0086000	2075	75-87-6	Chloroethanal	0090004	2232	107-20-0
Chloramben	0679000			Chloroethane	1825000		
Chlorbisan	0680000			Chloroethanenitrile	0091001	2668	107-14-2
Chlordane, flammable liquid	0681000	2762		Chloroethanol	0189003	1135	107-07-3
Chlordecone	0682000			Chloroethene	0405001	1086	75-01-4
Chlorex	0129002	1916	111-44-4	Chloroethyl chloroformate	0095000	2742	627-11-2
Chlorfenvinfos	0683000			Chloroethylene	0405002	1086	75-01-4
Chloride of phosphorous	0335001	1809	7719-12-2	Chloroform	0096000	1888	67-66-3
Chlorine	0087000	1017	7782-50-5	Chloroformic acid, isopropyl ester	0247001	2407	108-23-6
Chlorine cyanide	0111001	1589	506-78-5	Chloroformyl chloride	0329004	1076	75-44-5
Chlorine dioxide	0088002	9191	10049-04-4	Chlorohydrins	0699000		
Chlorine dioxide hydrate	0088000	9191	10049-04-4	Chloromethane	0273002	1063	74-87-3
Chlorine dioxide hydrate (frozen)	0088003	9191	10049-04-4	Chloromethyl cyanide	0091002	2668	107-14-2
Chlorine fluoride	0089001	1749	7790-91-2	Chloromethyl ether	0133004	2249	542-88-1
Chlorine monoxide	0684000			Chloromethyl ethyl ether	0700000	2354	
Chlorine pentafluoride	0685000	2548		Chloromethyl methyl ether	0701000	1239	
Chlorine peroxide	0088004	9191	10049-04-4	Chloromethyloxirane	0172002	2023	106-89-8
Chlorine sulfide	0366001	1828	10545-99-0	Chloronitrobenzene	0097000	1578	
Chlorine trifluoride	0089000	1749	7790-91-2	Chlorophenyl methane	0045003	1738	100-44-7
Chlormephos	0686000			Chloropicrin	0099000	1580	76-06-2
Chlormequat chloride	0687000			Chloropicrin: methyl chloride	0706000	1582	
Chloro methyl sulfane	0258001	3246	124-63-0	Chloropivaloyl chloride	0707000	9263	
Chloro (chloromethoxy) methane	0133003	2249	542-88-1	Chloroprene	0100000	1991	126-99-8
Chloroacetaldehyde	0090000	2232	107-20-0	Chloropropene	0020002	1100	107-05-1
Chloroacetaldehyde monomer	0090002	2232	107-20-0	Chloropropham	0712000		
Chloroacetic acid	0688000	1751		Chloropropylene	0020004	1100	107-05-1
Chloroacetic acid chloride	0092001	1752	79-04-9	Chloropropylene oxide	0172003	2023	106-89-8
Chloroacetic acid, ethyl ester	0184001	1181	105-39-5	Chlorosulfane	0369001	1828	10025-67-9
Chloroacetic acid, methyl ester	0274001	2295	96-34-4	Chlorosulfonic acid	0103000	1454	7790-94-5
Chloroacetic chloride	0092002	1752	79-04-9	Chlorosulfuric acid	0103001	1454	7790-94-5
Chloroacetone	0689000	1695		Chlorothalonil	0715000		
Chloroacetoneitrile	0091000	2668	107-14-2	Chlorotoluene	0104000	2238	106-43-4
Chloroacetophenone	0690000	1697		Chlorotrifluoride	0089002	1749	7790-91-2
Chloroacetyl chloride	0092000	1752	79-04-9	Chlorotrifluoroethane	0718000	1983	
Chloroaldehyde	0090003	2232	107-20-0	Chlorotrifluoroethylene	0394001	1082	79-38-9
Chloroallylene	0020001	1100	107-05-1	Chlorotrifluoromethane	0719000	1022	
Chlorobenzene	0093000	1134	108-90-7	Chlorotrimethylsilane	0398001	1298	75-77-4
Chlorobenzilate	0692000			Chloroxuron	0720000		
Chlorobutadiene	0100002	1991	126-99-8	Chlorpyrifos	0105000	2783	2921-88-2
Chlorobutane	0094000	1127	109-69-3	Chlorthiophos	0721000		
Chlorocarbonic acid, ethyl ester	0185002	1182	541-41-3	Chlorylen	0389001	2831	71-55-6

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Choline chloride carbamate	0078005		51-83-2	Copper naphthenate	0775000		
CHP	0107002	2116	80-15-9	Copper nitrate	0776000		
Chromic acetate	0722000	9101		Copper oxalate	0777000		
Chromic acid	0723000	1755		Copper subacetate	0778000		
Chromic anhydride	0724000	1463		Copper sulfate	0779000		
Chromic sulfate	0729000	9100		Copper sulfate, ammoniated	0780000	9110	
Chromium (dust)	0730000			Copper tartrate	0781000	9111	
Chromium oxychloride	0731000	1758		Coumaphos	0782000	2783	
Chromous chloride	0732000	9102		Coumatetralyl	0783000		
Chrysene	0733000			Creosote, coal tar	0784000	1993	
Cinnamenol	0362001	2055	100-42-5	Cresols	0786000	2076	
cis-Butene	0066002	1012	25167-67-3	Cresyl glycidyl ether	0787000		
Citric acid	0745000			Cresylate spent caustic solution	0788000		
Citrus red No.2	0746000			Crimidine	0789000	2588	
Clorox	0360003	1791	7681-52-9	Croton oil	0790000		
CO	0082003	1016	630-08-0	Crotonal	0106003	1143	4170-30-3
Coal gas	0748000	1023		Crotonaldehyde (E)	0106004	1143	4170-30-3
Coal naptha	0039002	1114	71-43-2	Crotonaldehyde (Stabilized)	0106000	1143	4170-30-3
Coal oil	0249001	1223	8008-20-6	Crude oil	0791000		
Cobalt	0749000			CTFE	0394002	1082	79-38-9
Cobalt acetate	0750000			Cumene	0246001	1918	98-82-8
Cobalt bromide	0751000			Cumene hydroperoxide	0107000	2116	80-15-9
Cobalt carbonyl	0752000			Cumyl hydroperoxide	0107003	2116	80-15-9
Cobalt chloride	0753000			Cupferron	0792000		
Cobalt fluoride	0754000			Cupriethylene diamine solution	0793000	1761	
Cobalt formate	0755000	9104		Curmol	0246002	1918	98-82-8
Cobalt nitrate	0756000			Cyanazine	0794000		
Cobalt sulfamate	0757000			Cyanoacetic acid	0108000		372-09-8
Cobalt sulfate	0758000			Cyanoacetoneitrile	0254001	2647	109-77-3
Cocculus	0759000	1584		Cyanobenzene	0040002	2224	100-47-0
Coconut oil:edible	0760000			Cyanobromide	0110002	1889	506-68-3
Colchicine	0761000			Cyanoethane	0346001	2404	107-12-0
Collodion	0762000	2059		Cyanoethylene	0013002	1093	107-13-1
Copper	0763000			Cyanogen	0109000	1026	460-19-5
Copper acetate	0764000	9106		Cyanogen bromide	0110003	1889	506-68-3
Copper acetoarsenite	0765000	1585		Cyanogen chloride	0111000	1589	506-78-5
Copper arsenite	0766000	1586		Cyanogen iodide	0112000		506-78-5
Copper bromide	0767000			Cyanogen monoiodide	0112001		506-78-5
Copper chloride	0768000	2802		Cyanomethane	0006001	1648	75-05-8
Copper cyanide	0769000	1587		Cyanomethanol	0213001		107-16-4
Copper fluoroborate	0770000			Cyanotoluene	0324005	2470	140-29-4
Copper formate	0771000			Cyanuric chloride	0113000	2670	108-77-0
Copper glycinate	0772000			Cycasin	0795000		
Copper iodide	0773000			Cyclobutane	0796000	2601	
Copper lactate	0774000			Cycloheptane	0114000	2241	291-64-5

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Cycloheptatriene	0797000	2603		Diacetone alcohol	0824000	1148	
Cycloheptene	0798000	2242		Diacetone alcohol peroxide	0825000	2163	
Cyclohexane	0115000	1145	108-94-1	Diacetyl	0826000	2346	
Cyclohexanol	0799000			Diacetylmethane	0320003	2310	123-54-6
Cyclohexanone	0116000	1915	108-94-1	Diaflan	0394003	1082	79-38-9
Cyclohexanone peroxide	0800000	2119		Diakon	0290001	1247	80-62-6
Cyclohexatriene	0039003	1114	71-43-2	Dialifos	0828000	3018	
Cyclohexene	0801000	2256		Diallate	0829000		
Cyclohexenyl trichlorosilane	0802000	1762		Diallyl ether	0831000	2360	
Cycloheximide	0117000		66-81-9	Diallylamine	0830000	2359	
Cyclohexyl acetate	0804000	2243		Diamide	0223002		302-02-2
Cyclohexyl isocyanate	0805000	2488		Diamine	0223004		302-02-2
Cyclohexylamine	0118000	2357	108-91-8	Diamine hydrate	0223003		302-02-2
Cyclohexylketone	0116002	1915	108-94-1	Diamine sulfate	0224001		10034-93-2
Cyclohexylmethane	0276001	2296	108-87-2	Diaminotoluene	0385001	1709	95-80-7
Cyclopentane	0119000	1146	142-29-0	Diammonium sulfate	0833000		
Cyclopentanol	0806000	2244		Diammonium sulfide	0029002	2683	12135-76-1
Cyclopentanone	0807000	2245		Diammonium sulfite	0030001	9090	10196-04-0
Cyclopentene	0120000	2246	142-29-0	Diatol	0142003	2366	105-58-8
Cyclopentimine	0338002	2401	110-89-4	Diazan	0171001		514-73-8
Cyclopropane	0121000	1027	95-75-7	Diazinon	0836000	2783	
Dakins solution	0360004	1791	7681-52-9	Diazomethane	0837000		
Dalapon	0809000	1760		Dibenzo (A,E) pyrene	0838000		
DCE	0408001	1303	75-35-4	Dibenzo (A,E) pyrene	0839000		
DCEE	0129003	1916	111-44-4	Dibenzo (A,H) anthracene	0845000		
DCP	0137004	2048	77-73-6	Dibenzo (A,H) pyrene	0846000		
DDC	0154002	2262	79-44-7	Dibenzo (A,I) pyrene	0847000		
DDD	0810000	2761		Dibenzo (A,J) acridine	0848000		
DEA	0140002	1154	109-89-7	Dibenzo (A,L) pyrene	0849000		
DEAE	0141001	2686	100-37-8	Dibenzofuran	0851000		
Decaborane	0123000	1868	17702-41-9	Dibenzoyl peroxide	0852000	2087	
Decaborane tetrahydride	0123002	1868	17702-41-9	Dibenzyl ether	0124000		103-50-4
Decaborane (14)	0123001	1868	17702-41-9	Diborane	0125000	1911	19287-45-7
Decabromodiphenyl oxide	0812000			Diborane hexahydride	0125002	1911	19287-45-7
Decahydronaphthalene	0813000	1147		Dibromoethane	0192003	1605	106-93-4
Decaldehyde	0814000			Dibromomethane	0126000	2664	74-95-3
Decanoic acid	0815000			Dibutyl phenol	0860000		
DEK	0146001	1156	96-22-0	Dibutyl phthalate	0861000		
Demeton	0820000			Dicamba	0863000		
Demeton-s-methyl	0821000			Dichlobenil	0864000		
DEN	0140003	1154	109-89-7	Dichlone	0865000		
Denatured alcohol	0177004	1170	64-17-5	Dichloricide	0128002	1592	106-46-7
DETA	0143003	2079	111-40-0	Dichloro-1,2-propane	0351002	1279	78-87-5
Deuterium	0822000	1957		Dichloroacetic acid	0866000	1764	
Dextrose solution	0823000			Dichloroacetic acid, methyl ester	0278001	2299	116-54-1

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Dichloroacetyl chloride	0867000	1765		Diethyl benzene	0891000	2049	
Dichloroacetylene	0868000			Diethyl carbamazine citrate	0892000		
Dichlorobromomethane	0870000			Diethyl carbonate	0142000	2366	105-58-8
Dichlorobutene	1839000	2924		Diethyl cellosolve	0195002	1153	629-14-1
Dichlorobutene	1839001	2920		Diethyl chlorophosphate	0893000		
Dichlorodifluoromethane	0871000	1028		Diethyl ether	0144000	1155	60-29-7
Dichlorodimethylsilane	0155001	1162	75-78-5	Diethyl glycol	0195003	1153	629-14-1
Dichlorodimethylsilicon	0155002	1162	75-78-5	Diethyl oxide	0144001	1155	60-29-7
Dichloroethane	0193002	1184	107-06-2	Diethyl phthalate	0901000		
Dichloroether	0129004	1916	111-44-4	Diethyl stilbestrol	0902000		
Dichloroethyl ether	0129005	1916	111-44-4	Diethyl sulfate	0903000	1594	
Dichloroethylarsine	0186002	1892	598-14-1	Diethyl sulfide	0904000	2375	
Dichloroethylphenylsilane	0204001	2435	1125-27-5	Diethyl zinc	0905000	1366	
Dichloroethylsilane	0187001	1183	1789-58-8	Diethylaluminum chloride	0887000		
Dichloromethane	0132000	1593	75-09-2	Diethylaluminum hydride	0888000		
Dichloromethyl benzene	0047004	1886	98-87-3	Diethylamine	0140000	1154	109-89-7
Dichloromethyl ether	0133000	2249	542-88-1	Diethylaminoethanol	0141000	2686	100-37-8
Dichloromethylphenylsilane	0873000			Diethylene ether	0169002	1165	123-91-1
Dichloromethylsilane	0279001	1242	75-54-7	Diethylene glycol	0894000		
Dichloromonofluoromethane	0874000	1029		Diethylene glycol dibutyl ether	0895000		
Dichlorophenoxyacetic acid	0122001	2765	94-75-7	Diethylene glycol dimethyl ether	0896000		
Dichlorophenoxyacetic esters	0876000			Diethylene glycol monobutyl ether	0897000		
Dichlorophenyl phosphine	0327002	2798	644-97-3	Diethylene glycol monobutyl ether acetate	0898000		
Dichlorophenylarsine	0325001	1556	696-28-6	Diethylene glycol monoethyl ether	0899000		
Dichlorophenyltrichlorosilane	0134000	1766	27137-85-5	Diethylene glycol monomethyl ether	0900000		
Dichloropropene	0135000	2047	542-75-6	Diethylene oxide	1823000		
Dichloropropionic acid	0878000	1760		Diethylene oximide	0298001	2054	110-91-8
Dichloropropylene	0135003	2047	542-75-6	Diethylenetriamine	0143000	2079	111-40-0
Dichlorosilane	0136000	2189	4109-96-0	Diethylenimide oxide	0298002	2054	110-91-8
Dichlorosilicone	0136001	2189	4109-96-0	Diethylethanamine	0141003	2686	100-37-8
Dichlorosulfane	0366002	1828	10545-99-0	Diethylketone	0146000	1156	96-22-0
Dichlorotetrafluoroethane	0879000	1958		Difluorine	0207002		7782-41-4
Dichlorvos	0882000	2783		Difluorine monoxide	0316001	2190	7783-41-7
Dicofol	0883000			Difluorochloromethane	0906000	1018	
Dicrotophos	0884000			Difluorodichloromethane	0907000	1028	
Dicyan	0109002	1026	460-19-5	Difluoroethane	0147000	1030	75-37-6
Dicyanogen	0109003	1026	460-19-5	Difluorophosphoric acid	0909000	1768	
Dicyanomethane	0254002	2647	109-77-3	Diglycidyl ether	0910000		
Dicyclopentadiene	0137000	2048	77-73-6	Diheptyl phthalate	0911000		
Dieldrin	0885000	2761		Dihydrogen dioxide	0232001	2015	7722-84-1
Diepoxybutane	0138000		1464-53-5	Dihydrogen selenide	0233001	2202	7783-07-5
Diesel	0139001			Dihydrooxirene	0199001	1040	75-21-8
Diesel fuel	0139000	1202		Diisobutyl amine	0913000	2361	
Diethanol amine	0886000			Diisobutyl carbinol	0914000		
Diethyl	0060002	1011	106-97-8	Diisobutyl ketone	0916000	1157	

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Diisobutyl phthalate	0917000			Dimethylbenzyl hydroperoxide	0107004	2116	80-15-9
Diisobutylene	0915000	2050		Dimethylcarbamic chloride	0154003	2262	79-44-7
Diisodecyl phthalate	0918000			Dimethylcarbamoyl chloride	0154000	2262	79-44-7
Diisononyl phthalate	0919000			Dimethylcarbinol	0242001	1219	67-63-0
Diisooctyl phthalate	0920000			Dimethyldichlorosilane	0155000	1162	75-78-5
Diisopropanol amine	0921000			Dimethylene diamine	0191001	1604	107-15-3
Diisopropyl benzene (all isomers)	0922000			Dimethylene oxide	0199002	1040	75-21-8
Diisopropyl benzene hydroperoxide	0923000	2171		Dimethylenimine	0198004	1185	151-56-4
Diisopropyl ether	0924000	1159		Dimethylethanolamine	0933000	2051	
Diisopropylamine	0148000	1158	108-18-9	Dimethylmethane	0341001	1978	74-98-6
Diketene	0149000	2521	674-82-8	Dimetilan	0948000		
Dimefox	0925000	3018		Di-n-amyl phthalate	0835000		
Dimethoate	0926000			Di-n-amylamine	0834000	2841	
Dimethyamine, anhydrous	0152000	1032	124-40-3	Di-n-butyl amine	0854000	2248	
Dimethyl	0173003		74-84-0	Di-n-butyl ether	0855000	1149	
Dimethyl adipate	0927000			Di-n-butyl ketone	0857000		
Dimethyl carbonate	0931000	1161		Di-n-butyl phthalate	0862000		
Dimethyl cellosolve	0150002	2252	110-71-4	Dinitrobenzene	0166000	1597	
Dimethyl disulfide	0156000	2381	624-92-0	Dinitrochlorobenzene	0949000	1577	
Dimethyl ether	0157000	1033	115-10-6	Dinitrocresol	0167003	1598	534-52-1
Dimethyl formamide	0158000	2265	68-12-2	Dinitrogen monoxide	0311002		10024-97-2
Dimethyl glutarate	0934000			Dinitrogen tetroxide	0305001	1067	10102-44-0
Dimethyl hexane dihydroperoxide	0935000	2174		Dinitro-o-cresol	0167000	1598	534-52-1
Dimethyl hydrogen phosphite	0936000			Dinitrophenol(dry)	0168000		51-28-5
Dimethyl ketone	0004001	1090	67-64-1	Dinitrophenol(solution)	0168001		51-28-5
Dimethyl mercury	0937000			Dinitrophenol(wetted with >15% water)	0168002		51-28-5
Dimethyl monosulfide	0163001	1164	75-18-3	Di-n-octyl phthalate	0956000		
Dimethyl phenylamine	0153003	2253	121-69-7	Dinofan	0168006		51-28-5
Dimethyl phosphorochlorodithioate	0161000	2267	2524-03-0	Dinonyl phthalate	0952000		
Dimethyl phthalate	0940000			Dinoterb	0953000		
Dimethyl polysiloxane	0941000			Di-n-propylamine	0170001	2383	142-84-7
Dimethyl succinate	0944000			Diocetyl adipate	0954000		
Dimethyl sulfate	0162000	1595	77-78-1	Diocetyl phthalate	0955000		
Dimethyl sulfide	0163000	1164	75-18-3	Diocetyl sodium sulfosuccinate	0957000		
Dimethyl sulfoxide	0945000			Dioform	0131003	1150	540-59-0
Dimethyl terephthalate	0946000			Dioxathion	0958000		
Dimethyl tetracholorterephthalate	0947000			Dioxygen	0315002		7782-44-7
Dimethyl thiophosphoryl chloride	0161001	2267	2524-03-0	DIPA	0148001	1158	108-18-9
Dimethyl zinc	0164000	1370	544-97-8	Dipentene	0959000	2052	
Dimethylacetamide	0151000		127-19-5	Diphacinone	0960000		
Dimethylacetone	0146002	1156	96-22-0	Diphenamide	0961000		
Dimethylamide acetate	0151002		127-19-5	Diphenyl	0962000		
Dimethylamine solution	0928000	1160		Diphenyl amine	0963000		
Dimethylaminobenzene	0153001	2253	121-69-7	Diphenyl amine chloroarsine	0964000	1698	
Dimethylalanine	0153002	2253	121-69-7	Diphenyl ether	0966000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Diphenyl methane diisocyanate	0967000	2489		Dodecyl benzene sulfonic acid, triethanolamine	0989000		
Diphenyldichlorosilane	0965000	1769		Dodecyl diphenyl ether disulfonate	0990000		
Diphosgene	0329005	1076	75-44-5	Dodecyl methacrylate	0994000		
Diphosphorus pentasulfide	0333001	1340	1314-80-3	Dodecyl sulfate, diethanolamine salt	0996000		
Dipotassium persulfate	0340002	1492	7727-21-1	Dodecyl sulfate, magnesium salt	0997000		
Diproanoate	0106005	1143	4170-30-3	Dodecyl sulfate, sodium salt	0998000		
Dipropylamine	0170000	2383	142-84-7	Dodecyl sulfate, triethanolamine salt	0999000		
Dipropylene glycol methyl ether	0970000			Dodecyl/pentadecyl methacrylate	0995000		
Dipropylene glycol	0968000			Dodecyltrichlorosilane	1000000	1771	
Dipropylene glycol dibenzoate	0969000			Dorlone	0135004	2047	542-75-6
Diquat	0971000	2781		Doryl	0078006		51-83-2
Direct black 38	0972000			Dowcide 7	0318001	3155	87-86-5
Direct blue 6	0973000			Dowclene LS	0389002	2831	71-55-6
Direct brown 95	0974000			Dowfume	1826000		
Disulfoton	0975000	2783		Dowtherm	0991000		
Disulfur dichloride	0369002	1828	10025-67-9	Dry ice	0080004	1013	124-38-9
Disulfuric acid	0314001	1831	8014-95-7	Dursban	0105001	2783	2921-88-2
Di-tert-butyl peroxide	0858000	2102		Dutch oil	0193003	1184	107-06-2
Dithane A-4	0166007	1597		EB	0179001	1175	100-41-4
Dithiabutane	0156001	2381	624-92-0	ECH	0172004	2023	106-89-8
Dithiazanine iodide	0171000		514-73-8	ED	0186003	1892	598-14-1
Dithiobiuret	0976000			EDB	0192004	1605	106-93-4
Ditridecyl phthalate	0977000			EGM	0197001	1188	109-86-4
Diundecyl phthalate	0978000			EGME	0197002	1188	109-86-4
Diuron	0979000			Elemental phosphorous	0331002		7723-14-0
Divinyl	0059005	1010	106-99-0	Endosulfan	1001000	2761	
Divinylene oxide	0215001	2389	110-00-9	Endosulfan sulfate	1004000		
DMA	1822000			Endothion	1005000		
DMAC	0151004		127-19-5	Endrin	1006000	2761	
DMCC	0154004	2262	79-44-7	Endrin aldehyde	1007000		
DMF	0158001	2265	68-12-2	EPI	0172005	2023	106-89-8
DMFA	0158002	2265	68-12-2	Epichlorohydrin	0172000	2023	106-89-8
DMH	0159002	1163	57-14-7	EPN	1008000		
DMPD	0160002		99-98-9	Epoxy propane	0353001	1280	75-56-9
DMS	0163002	1164	75-18-3	Epoxyethane	0199003	1040	75-21-8
DMSO	0980000			Epoxyethylbenzene	0363001		96-09-3
DNA	0165004	1596	97-02-9	Erythrene	0059006	1010	106-99-0
DNBP	0981000			Estradiol 17 b	1009000		
Dodecanol	0982000			Estrone	1010000		
Dodecene	0983000			Ethanal	0002002	1089	75-07-0
Dodecyl benzene	0984000			Ethanamine	0178002	1036	75-04-7
Dodecyl benzene sulfonic acid	0985000	2584		Ethane dinitrate	0109004	1026	460-19-5
Dodecyl benzene sulfonic acid, calcium	0986000			Ethane(compressed gas)	0173000		74-84-0
Dodecyl benzene sulfonic acid, isopropyl amine	0987000			Ethane(refrigerated liquid)	0173001		74-84-0
Dodecyl benzene sulfonic acid, sodium salt	0988000			Ethanediol dimethyl ether	0150004	2252	110-71-4

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Ethanenitrile	0006002	1648	75-05-8	Ethyl chloride	0183000	1037	75-00-3
Ethanethiol	0202001	2363	75-08-1	Ethyl chloroacetate	0184000	1181	105-39-5
Ethanoic acid	1840002		64-19-7	Ethyl chlorocarbonate	0185003	1182	541-41-3
Ethanoic anhydride	0003005	1715	108-24-7	Ethyl chloroformate	0185000	1182	541-41-3
Ethanol	0177005	1170	64-17-5	Ethyl chloromethanoate	0185004	1182	541-41-3
Ethanolamine	0174000	2491	141-43-5	Ethyl chlorothioformate	1037000	2826	
Ethanoyl bromide	0007002	1716	506-96-7	Ethyl cyanide	0346002	2404	107-12-0
Ethanoyl chloride	0008003	1717	75-36-5	Ethyl cyclohexane	1038000		
Ethene	0188002	1038	74-85-1	Ethyl ethanoate	0175003	1173	141-78-6
Ethenoxide	0199005	1040	75-21-8	Ethyl ether	0144003	1155	60-29-7
Ethenylbenzene	0362002	2055	100-42-5	Ethyl formate	0200000	1190	109-94-4
Ether	0144002	1155	60-29-7	Ethyl glycol	0196004	1171	110-80-5
Etherin	0188003	1038	74-85-1	Ethyl glyme	0195005	1153	629-14-1
Ethienocarb	1011000			Ethyl hexaldehyde	1051000	1191	
Ethine	0009001	1001	74-86-2	Ethyl hexyl tallate	1055000		
Ethinylcarbinol	0343001	1986	107-19-7	Ethyl hydrosulfide	0202002	2363	75-08-1
Ethinylestradiol	1012000			Ethyl isocyanate	0201000	2481	109-90-0
Ethion	1013000	2783		Ethyl ketone	0146003	1156	96-22-0
Ethoprophos	1014000			Ethyl lactate	1057000	1192	
Ethoxy triglycol	1022000			Ethyl mercaptan	0202000	2363	75-08-1
Ethoxydihydropyran	1015000			Ethyl methacrylate	1058000	2277	
Ethoxyethylbenzene	1016000			Ethyl methane sulfonate	1059000		
Ethoxylated dodecanol	1017000			Ethyl methanoate	0200001	1190	109-94-4
Ethoxylated nonylphenol	1018000			Ethyl methyl ether	1060000	1039	
Ethoxylated pentadecanol	1019000			Ethyl methyl ketone	0280002	1193	78-93-3
Ethoxylated tetradecanol	1020000			Ethyl monochloroacetate	0184002	1181	105-39-5
Ethoxylated tridecanol	1021000			Ethyl nitrate	1061000	1993	
Ethyl acetate	0175000	1173	141-78-6	Ethyl nitrile	0006003	1648	75-05-8
Ethyl acetoacetate	1023000			Ethyl nitrite	0203000	1194	109-95-5
Ethyl acetylene	1024000	2452		Ethyl oxide	1821000		
Ethyl acrylate	0176000	1917	140-88-5	Ethyl phenol	1836000		
Ethyl alcohol	0177000	1170	64-17-5	Ethyl phosphonothioic dichloride	1062000	2927	
Ethyl aluminum dichloride	1025000			Ethyl phosphorodichloridate	1063000	2927	
Ethyl aluminum sesquichloride	1026000			Ethyl pirimifos	1064000		
Ethyl amyl ketone	1027000	2271		Ethyl propenoate	0176002	1917	140-88-5
Ethyl azinphos	1029000			Ethyl rhodanate	0205001		542-90-5
Ethyl bromide	1031000	1891		Ethyl S	0180002	2734	538-07-8
Ethyl bromoacetate	1032000	1603		Ethyl silicate	1066000	1292	
Ethyl butanoate	0182002	1180	105-54-4	Ethyl sulfate	1067000	1594	
Ethyl butanol	1033000	2275		Ethyl sulfhydrate	0202003	2363	75-08-1
Ethyl butyl ether	1034000	1179		Ethyl sulfocyanate	0205002		542-90-5
Ethyl butyrate	0182000	1180	105-54-4	Ethyl t-butyl ether	1035000		
Ethyl carbamate	1036000			Ethyl t-butyl ether	1070000		
Ethyl carbonate	0142004	2366	105-58-8	Ethyl thiocyanate	0205000		542-90-5
Ethyl cellosolve	0196002	1171	110-80-5	Ethyl vinyl ether	0406001	1302	109-92-2

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Ethyl-2-propenoate	0176003	1917	140-88-5	Ethylimine	0198005	1185	151-56-4
Ethyl-3-ethoxypropionate	1050000			Ethylphenyldichlorosilane	0204000	2435	1125-27-5
Ethylaldehyde	0002003	1089	75-07-0	Ethyltrichlorosilane	0206000	1196	115-21-9
Ethylamine	0178000	1036	75-04-7	Ethyne	0009002	1001	74-86-2
Ethylbenzene	0179000	1175	100-41-4	ETN	0178003	1036	75-04-7
Ethyl-bis-(2-chloroethyl) amine	0180000	2734	538-07-8	ETOH	0177006	1170	64-17-5
Ethylbutylamine	0181000	2734	13360-63-9	Eufin	0142005	2366	105-58-8
Ethylchloroarsine	0186000	1892	598-14-1	F-12	1072000	1028	
Ethylchlorosilane	0187000	1183	1789-58-8	F-22	1073000	1018	
Ethylene	0188000	1038	74-85-1	FAA	0208001	2642	144-49-0
Ethylene bromide	0192005	1605	106-93-4	Fenamiphos	1074000		
Ethylene carboxylic acid	0012002	2218	79-10-7	Fenitrothion	1075000		
Ethylene chloride	0193004	1184	107-06-2	Fensulfothion	1076000	2783	
Ethylene chlorohydrin	0189000	1135	107-07-3	Ferric ammonium citrate	1077000	9118	
Ethylene cyanohydrin	0190000		109-78-4	Ferric ammonium oxalate	1078000	9119	
Ethylene dibromide	0192000	1605	106-93-4	Ferric chloride	1079000	1773	
Ethylene dichloride	0193000	1184	107-06-2	Ferric fluoride	1080000	9120	
Ethylene fluoride	0147002	1030	75-37-6	Ferric glycerophosphate	1081000		
Ethylene fluorohydrin	0194000		371-62-0	Ferric nitrate	1082000	1466	
Ethylene glycol	1041000			Ferric sulfate	1083000	9121	
Ethylene glycol acetate	1042000			Ferrous ammonium sulfate	1084000	9122	
Ethylene glycol diacetate	1043000			Ferrous chloride	1085000	1759	
Ethylene glycol diethyl ether	0195000	1153	629-14-1	Ferrous fluoroborate	1086000		
Ethylene glycol dimethyl ether	0150005	2252	110-71-4	Ferrous oxalate	1087000		
Ethylene glycol ethyl ether	0196003	1171	110-80-5	Ferrous sulfate	1088000	9125	
Ethylene glycol isopropyl ether	1044000			Firedamp	0257003		74-82-8
Ethylene glycol methyl ether	0197003	1188	109-86-4	FKS	0210001	1778	16961-83-4
Ethylene glycol monobutyl ether	1045000	2369		Flue gas	0082004	1016	630-08-0
Ethylene glycol monobutyl ether acetate	1046000			Fluonetil	1089000		
Ethylene glycol monoethyl ether	0196000	1171	110-80-5	Fluoboric acid	1090000	1775	
Ethylene glycol monoethyl ether acetate	1047000	1172		Fluometuron	1091000		
Ethylene glycol monomethyl ether	0197000	1188	109-86-4	Fluoranthene	1092000		
Ethylene glycol phenyl ether	1048000			Fluorene	1093000		
Ethylene oxide	0199000	1040	75-21-8	Fluoric acid	0231002	1052	7664-39-3
Ethylene tetrachloride	0375001	1897	127-18-4	Fluorine monoxide	0316002	2190	7783-41-7
Ethylene thiourea	1049000			Fluorine oxide	0316003	2190	7783-41-7
Ethylene trichloride	0390002	1710	79-01-6	Fluorine(compressed gas)	0207000	1045	7782-41-4
Ethylenediamine	0191000	1604	107-15-3	Fluorine(cryogenic liquid)	0207001	9192	7782-41-4
Ethylenediamine tetracetic acid	1040000	9117		Fluoroacetamide	1094000		
Ethyleneimine	0198000	1185	151-56-4	Fluoroacetic acid	0208000	2642	144-49-0
Ethylformic acid	0345001	1848	79-09-4	Fluoroacetyl chloride	1095000		
Ethylic acid	1840003		64-19-7	Fluorobenzene	0209000	2387	462-06-6
Ethylidene norbornene	1056000			Fluoroethanoic acid	0208003	2642	144-49-0
Ethylidine chloride	0130001	2362	75-34-3	Fluoroethene	0407001	1860	75-02-5
Ethylidine dichloride	0130002	2362	75-34-3	Fluoroethylene	0407003	1860	75-02-5

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Fluorophosgene	0084004	2414	353-50-4	Furfuryl alcohol	1112000	2874	
Fluorosilicic acid	0210000	1778	16961-83-4	Furodan	0079003	2757	1563-66-2
Fluorosulfonic acid	0211000	1777	7789-21-1	Fusel Oil	1113000	1201	
Fluorosulfuric acid	0211001	1777	7789-21-1	GAA	0012003	2218	79-10-7
Fluosilicic acid	0210002	1778	16961-83-4	Gallic acid	1114000		
Fonofos	1099000	2783		Gallium trichloride	1116000		
Forane 22B	1100000			Gallium, metal	1115000	2803	
Formaldehyde cyanohydrin	0213000		107-16-4	Gasoline	0217000	1203	8006-61-9
Formaldehyde (solution)	0212001	2209	50-00-0	GDME	0150006	2252	110-71-4
Formaldehyde (solution, flammable)	0212000	1198	50-00-0	Germane	1117000	2192	
Formalin	0212002		50-00-0	Gettysolve B	0221001	1208	110-54-3
Formamide	1101000			Glacial acetic acid	1840004		64-19-7
Formetanate hydrochloride	1102000			Glacial acrylic acid	0012004	2218	79-10-7
Formic acid	0214000	1779	64-18-6	Glutaraldehyde solution	1118000		
Formic acid, ethyl ester	0200002	1190	109-94-4	Glycerine	1119000		
Formic acid, isopropyl ester	0248001	2408	625-55-8	Glycerol trinitrate	0306003	0143	55-63-0
Formic acid, methy lester	0281001	1243	107-31-3	Glycidaldehyde	1120000	2622	
Formic ether	0200003	1190	109-94-4	Glycidyl methacrylate	1121000		
Formothion	1103000			Glycinol	0174002	2491	141-43-5
Formparanate	1104000			Glycol cyanohydrin	0190003		109-78-4
Formyl hydrazino-4-(5-nitro-2-furyl) thiazole	1105000			Glycol dimethyl ether	0150007	2252	110-71-4
Formyl trichloride	0096001	1888	67-66-3	Glycol methyl ether	0197004	1188	109-86-4
Formylic acid	0214002	1779	64-18-6	Glycolonitrile	0213002		107-16-4
Fosthietan	1106000			Glyconitrile	0213003		107-16-4
Fosvex	0377003		107-49-3	Glyme	0150008	2252	110-71-4
Freon 10	0083004	1846	56-23-5	Glyme-1	0195006	1153	629-14-1
Freon 12	1107000	1028		Glyoxal	1122000		
Freon 150	0193006	1184	107-06-2	Gly-oxide	0401002	1511	124-43-6
Freon 152	0147003	1030	75-37-6	Glyphosate	0218000		1071-83-6
Freon 20	0096002	1888	67-66-3	Grain alcohol	0177007	1170	64-17-5
Freon 22	1108000	1018		Grasex	0086001	2075	75-87-6
Freon 40	0273003	1063	74-87-3	Halon 10001	0283001	2644	74-88-4
Freon F12	1109000			Halon 1001	0268003	1062	74-83-9
Fuberidazole	1110000			HCl	0229002		7647-01-0
Fuel oil #1	1828000			HCN	0230001	1051	74-90-8
Fuel oil #2	0139002			Hendecane	1123000	2330	
Fuel oil #4	0139003			Heptachlor	1124000		
Fumaric acid	1111000			Heptachlor epoxide	1125000		
Fumette	0259001		558-25-8	Heptachlorodibenzofurans	1126000		
Fuming sulfuric acid	0314002	1831	8014-95-7	Heptachlorodibenzo-p-dioxins	1127000		
Furadan	0079001	2757	1563-66-2	Heptamethylene	0114001	2241	291-64-5
Furadan 3G	0079002	2757	1563-66-2	Heptane	0219000	1206	142-82-5
Furaldehyde	0216002	1199	98-01-1	Heptanoic acid	1128000		
Furan	0215000	2389	110-00-9	Heptanol	1129000		
Furfural	0216000	1199	98-01-1	Heptyl acetate	1130000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Heptylene	0220002	2278	592-76-7	Hydrazinium sulfate	0224004		10034-93-2
Hexachloroacetone	1131000	2661		Hydrazoic acid, sodium salt	0357002	1687	26628-22-8
Hexachlorobenzene	1132000	2729		Hydrazomethane	0282001	1244	60-34-4
Hexachlorobutadiene	1133000	2279		Hydrochloric acid	0225000	1789	7647-01-0
Hexachlorocyclohexanes	1134000			Hydrochloric ether	0183001	1037	75-00-3
Hexachlorocyclopentadiene	1135000	2646		Hydrocyanic acid	0230003	1051	74-90-8
Hexachlorodibenzofurans	1136000			Hydrocyanic acid, sodium salt	0358001	1689	143-33-9
Hexachlorodibenzo-p-dioxins	1137000			Hydrocyanic acid, solution	0230002	1051	74-90-8
Hexachloroethane	1138000	9037		Hydrofluoric acid	0226000	1790	7664-39-3
Hexachloronaphthalene	1139000			Hydrofuran	0379002	2056	109-99-9
Hexachlorophene	1140000	2875		Hydrogen arsenic	0037003	2188	7784-42-1
Hexadecyl sulfate, sodium salt	1141000			Hydrogen bromide	0228000	1048	10035-10-6
Hexadecyl trimethyl ammonium chloride	1142000			Hydrogen bromide, anhydrous	0228002	1048	10035-10-6
Hexaethyl tetraphosphate and compressed gas	1143000	1612		Hydrogen carboxylic acid	0214003	1779	64-18-6
Hexafluoroacetone	1144000	2420		Hydrogen chloride (gas)	0229000	1050	7647-01-0
Hexafluoroethane	1145000	2193		Hydrogen chloride (refrigerated liquid)	0229001	2186	7647-01-0
Hexafluosilicic acid	0210003	1778	16961-83-4	Hydrogen chloride (solution)	0225001	1789	7647-01-0
Hexahydroaniline	0118004	2357	108-91-8	Hydrogen cyanide	0230000	1051	74-90-8
Hexahydrobenzene	0115002	1145	108-94-1	Hydrogen dioxide	0232002	2015	7722-84-1
Hexahydropyridine	0338003	2401	110-89-4	Hydrogen fluoride	0231000	1052	7664-39-3
Hexahydrotoluene	0276002	2296	108-87-2	Hydrogen fluoride, solution	0226001	1790	7664-39-3
Hexamethyl phosphoramidate	1147000			Hydrogen hexafluorosilicate	0210004	1778	16961-83-4
Hexamethylene	0115003	1145	108-94-1	Hydrogen iodide, anhydrous	1157000	2197	
Hexamethylene diamine	1148000	2280		Hydrogen nitrate	0302003		7697-37-2
Hexamethylene diisocyanate	1149000	2281		Hydrogen oxide	0232003	2015	7722-84-1
Hexamethylene tetramine	1151000	1328		Hydrogen peroxide (>60%)	0232000	2015	7722-84-1
Hexamethyleneimine	1150000	2493		Hydrogen peroxide (35% solution)	1158000	2014	
Hexane	0221000	1208	110-54-3	Hydrogen phosphide	0330001	2199	7803-51-2
Hexanedinitrile	0015003	2205	111-69-3	Hydrogen selenide	0233000	2202	7783-07-5
Hexanoic acid	0077003	2829	142-62-1	Hydrogen sulfate	0368001	1830	7664-93-9
Hexanon	0116003	1915	108-94-1	Hydrogen sulfide	0234000	1053	7783-06-4
Hexene	0222000	2370	592-41-6	Hydrogen (compressed gas)	0227000	1049	1333-74-0
Hexone	0285001	1245	108-10-1	Hydrogen (cryogenic liquid)	0227001	1966	1333-74-0
Hexyl acetate	1155000			Hydroquinone	1159000	2662	
Hexylene	0222003	2370	592-41-6	Hydrosulfuric acid	0234001	1053	7783-06-4
Hexylene glycol	1156000			Hydroxyacetoneitrile	0213004		107-16-4
HF	0231003	1052	7664-39-3	Hydroxybenzene	0323005		108-95-2
HN1	0180003	2734	538-07-8	Hydroxylamine	0235000		7803-49-8
Hydracrylonitrile	0190004		109-78-4	Hydroxylamine sulfate	1161000	2865	
Hydrazine hydrate	0223005		302-02-2	Hydroxypropionitrile	0250002	3275	78-97-7
Hydrazine hydrogen sulfate	0224002		10034-93-2	Hydroxypropyl acrylate	1162000		
Hydrazine monosulfate	0224003		10034-93-2	Hydroxypropyl methacrylate	0236000		27813-02-1
Hydrazine sulfate	0224000		10034-93-2	Hypochlorite	0360005	1791	7681-52-9
Hydrazine (<64%)	0223000	2030	302-02-2	Hyponitrous ether	0203001	1194	109-95-5
Hydrazine (anhydrous or >64%)	0223001	2029	302-02-2	Indeno (1,2,3-CD) pyrene	1163000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Inerton- DW-DMC	0155003	1162	75-78-5	Isopropyl alcohol	0242003	1219	67-63-0
Inerton-DMCS	0155004	1162	75-78-5	Isopropyl bromide	0057001	2344	75-26-3
Iodine cyanide	0112002		506-78-5	Isopropyl chloride	1183000	2356	
Iodomethane	0283002	2644	74-88-4	Isopropyl chlorocarbonate	0247002	2407	108-23-6
Iron (powder)	1164000			Isopropyl chloroformate	0247000	2407	108-23-6
Iron carbonyl	0237001	1994	13463-40-6	Isopropyl cyanide	0240002	2284	78-82-0
Iron pentacarbonyl	0237000	1994	13463-40-6	Isopropyl cyclohexane	1184000		
Isobenzan	1165000			Isopropyl ether	1185000		
Isobutane	0238000	1969	75-28-5	Isopropyl formate	0248000	2408	625-55-8
Isobutanol	1166000	1212		Isopropyl methyl ketone	0269001	2397	563-80-4
Isobutenyl methyl ketone	1841001	1229	141-79-7	Isopropyl nitrate	1188000	1222	
Isobutyl aldehyde	1167000	2045		Isopropyl nitrile	0240003	2284	78-82-0
Isobutyl formate	1169000	2393		Isopropyl percarbonate,	1189000		
Isobutyl methyl carbinol	0284001	2053	108-11-2	Isopropyl peroxydicarbonate	1190000	2133	
Isobutyl methyl ketone	0285002	1245	108-10-1	Isopropyl propionate	1191000	2409	
Isobutylamine	1168000	1214		Isopropyl-3-methylpyrazolyl dimethylcarbamate	1187000		
Isobutylene	0239000	1055	115-11-7	Isopropylamine	0245000	1221	75-31-0
Isobutylene	0291001	2288	691-37-2	Isopropylbenzene	0246000	1918	98-82-8
Isobutyric acid	1170000	2529		Isopropylcyanohydrin	0005003	1541	75-86-5
Isobutyronitrile	0240000	2284	78-82-0	Isopropylidene acetone	1841002	1229	141-79-7
Isocumene	0348001	2364	103-65-1	Isothiocyanic acid, methyl ester	0288001	2477	556-61-6
Isocyanatoethane	0201002	2481	109-90-0	Isothiourea	0382001		62-56-6
Isocyanic acid, ethyl ester	0201001	2481	109-90-0	JP-1	0249002	1223	8008-20-6
Isocyanic acid, methyl ester	0286001	2480	624-83-9	Kepone	1192000		
Isodecaldehyde	1171000			Kerosene	0249000	1223	8008-20-6
Isodrin	1172000			Kerosine	0249003	1223	8008-20-6
Isofluorophate	1173000			Ketene	1193000		
Isohexene	0291002	2288	691-37-2	Ketene dimer	0149003	2521	674-82-8
Isooctaldehyde	1174000	1191		Kwik-Kil	0361003	1692	57-24-9
Isooctane	1175000	1262		Lacquer	1194000	1263	
Isooctyl alcohol	1176000			Lacquer thinner	1195000	1263	
isooctyl ester	1710000			Lactic acid	1196000		
Isopentadiene	0241001	1218	78-79-5	Lactonitrile	0250000	3275	78-97-7
Isopentane	1177000	1265		Lasiocarpine	1197000		
Isophorone	1178000			Laughing gas	0311003		10024-97-2
Isophorone diamine	1179000	2289		Lauric acid	1198000		
Isophorone diisocyanate (IPDI)	1180000	2290		Lauroyl peroxide	1199000	2124	
Isophthalic acid	1181000			Lauroyl peroxide (<42%)	1200000	2893	
Isoprene	0241000	1218	78-79-5	Lauryl mercaptan	1201000		
Isopropanol	0242000	1219	67-63-0	Lead	1202000		
Isopropanolamine	0243000		78-96-6	Lead acetate	1203000	1616	
Isopropene cyanide	0264002	3079	126-98-7	Lead arsenate	1204000	1617	
Isopropenyl acetate	1182000	2403		Lead chloride	1205000	2291	
Isopropenyl benzene	0244000	2303	98-83-9	Lead fluoride	1206000	2811	
Isopropenyl methyl ketone	0287001	1246	814-78-8	Lead fluoroborate	1207000	2291	

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Lead iodide	1208000			Malononitrile	0254000	2647	109-77-3
Lead nitrate	1209000	1469		m-Aminopyridine	0023004	2671	
Lead phosphate	1210000			Maneb	1235000	2968	
Lead stearate	1211000			Manganese (dust)	1236000		
Lead sulfate	1212000	1794		MAOH	0284002	2053	108-11-2
Lead sulfide	1213000			MAPP gas	0262002	1060	
Lead tetraacetate	1214000			Marsh gas	0257004		74-82-8
Lead thiocyanate	1215000			MB	0268004	1062	74-83-9
Lead thiosulfate	1216000			MBK	0271002	1224	591-78-6
Lead tungstate	1217000			MCB	0093002	1134	108-90-7
Lentin	0078007		51-83-2	m-Chloronitrobenzene	0097002	1578	
Leptophos	1218000			m-Dinitrobenzene	0166004	1597	
Lewisite	1219000			MEA	1824000		
Li	0253001	1415	7439-93-2	MEK	0280003	1193	78-93-3
Lindane	1220000	2761		Melamine	1237000		
Linseed oil	1221000			Melinite	0336002		88-89-1
Liquefied natural gas	0251000	1972	74-82-8	Mephosfolan	1238000		
Liquefied petroleum gas	0252000	1075	68476-85-7	Mercaptobenzene	0326002	2337	108-98-5
Liquid chlorine	0087001	1017	7782-50-5	Mercaptodimethur	1239000	2784	
Liquid oxygen	0315003		7782-44-7	Mercaptomethane	0289001	1064	74-93-1
Litharge	1222000			Mercuric acetate	1240000	1629	
Lithium	0253000	1415	7439-93-2	Mercuric ammonium chloride	1241000	1630	
Lithium aluminum hydride	1223000	1410		Mercuric chloride	1242000	1624	
Lithium bichromate	1224000			Mercuric cyanide	1243000	1636	
Lithium borohydride	1225000	1413		Mercuric iodide	1244000	1638	
Lithium chromate	1226000			Mercuric nitrate	1245000	1625	
Lithium hydride	1227000	1414		Mercuric oxide	1246000	1641	
Lithium metal	0253002	1415	7439-93-2	Mercuric sulfate	1248000	1645	
LNG	0251001	1972	74-82-8	Mercuric sulfide	1249000		
Lorsban	0105002	2783	2921-88-2	Mercuric thiocyanate	1250000	1646	
LOX	0315004		7782-44-7	Mercurous acetate	1251000	1629	
LPG	0252002	1075	68476-85-7	Mercurous chloride	1252000		
Luprisol	0345002	1848	79-09-4	Mercurous nitrate	1253000	1627	
Lye	0359004		1310-73-2	Mercury	1254000	2809	
Madone	0116004	1915	108-94-1	Mercury oxide	1255000	1641	
Magnesium perchlorate	1229000	1475		Mesityl oxide	1841000	1229	141-79-7
Magnesium phosphide	1230000	2011		Mestranol	1256000		
Magnesium (powder)	1228000	1418		Mesyl chloride	0258002	3246	124-63-0
Malathion	1231000	2783		Metaldehyde	1257000	1332	
Maleic acid	1232000	2215		meta-Xylene	0412005	1307	
Maleic anhydride	1233000	2215		Methacetone	0146004	1156	96-22-0
Maleic hydrazide	1234000			Methacrolein diacetate	1258000		
Malonic acid dinitrile	0254003	2647	109-77-3	Methacrylaldehyde	1259000	2396	
Malonic dinitrile	0254004	2647	109-77-3	Methacrylic acid	0255000	2531	79-41-4
Malonic mononitrile	0108001		372-09-8	Methacrylic acid chloride	0256001		920-46-7

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Methacrylic anhydride	1260000			Methyl amyl ketone	0267000	1110	110-43-0
Methacryloyl chloride	0256000		920-46-7	Methyl azinphos	1276000	2783	
Methacryloyloxyethyl isocyanate	1261000			Methyl azoxymethanol acetate	1277000		
Methaldehyde	0212003		50-00-0	Methyl benzoate	1279000	2938	
Methallyl chloride	1262000			Methyl bromide	0268000	1062	74-83-9
Methamidophos	1263000			Methyl butenol	1284000		
Methanal	0212004		50-00-0	Methyl butyl ketone	0271000	1224	591-78-6
Methane carboxylic acid	1840005		64-19-7	Methyl butyrate	0272000	1237	623-42-7
Methane sulfonyl chloride	0258000	3246	124-63-0	Methyl carbinol	0177008	1170	64-17-5
Methane sulfonyl fluoride	0259000		558-25-8	Methyl carbylamine	0286002	2480	624-83-9
Methane sulfuryl chloride	0258004	3246	124-63-0	Methyl cellosolve	0197006	1188	109-86-4
Methane trichloride	0096003	1888	67-66-3	Methyl chloride	0273000	1063	74-87-3
Methane (compressed gas)	0257000	1971	74-82-8	Methyl chloroacetate	0274000	2295	96-34-4
Methane (cryogenic liquid)	0257001	1972	74-82-8	Methyl chloroformate	1286000	1238	
Methanearsonic acid, sodium salt	1264000			Methyl chloromethyl ether	1287000	1239	
Methanecarbonitrile	0006004	1648	75-05-8	Methyl cyanide	0006005	1648	75-05-8
Methanephosphonyl chloride	0293001	9602	676-97-1	Methyl cyclohexanone	1288000	2297	
Methanesulfonic acid chloride	0258003	3246	124-63-0	Methyl cyclopentadiene dimer	1289000		
Methanethiol	0289002	1064	74-93-1	Methyl cyclopentadienyl manganese tricarbonyl	1290000		
Methanoic acid	0214004	1779	64-18-6	Methyl dichloroacetate	0278000	2299	116-54-1
Methanol	0260000	1230	67-56-1	Methyl dichloroarsine	1291000	1556	
Methiocarb	1265000			Methyl dichloroethanoate	0278002	2299	116-54-1
Methomyl	1266000			Methyl disulfide	0156002	2381	624-92-0
Methoxycarbonylethylene	0263003	1919	96-33-3	Methyl ether	0157001	1033	115-10-6
Methoxychlor	1268000			Methyl ethyl ketone	0280000	1193	78-93-3
Methoxyethyl mercuric acetate	1269000			Methyl ethyl pyridine	1300000	2300	
Methoxyethylene	0409001	1087	107-25-5	Methyl fluoroacetate	1301000		
Methoxymethyl isocyanate	1270000	2605		Methyl fluorosulfate	1302000		
Methyl 2-benzimidazole carbamate	1278000			Methyl formal	1303000	1234	
Methyl 2-chloroacrylate	0275000		80-63-7	Methyl formate	0281000	1243	107-31-3
Methyl 2-chloropropenoate	0275002		80-63-7	Methyl heptyl ketone	1304000		
Methyl 2-methyl-2-propenoate	0290003	1247	80-62-6	Methyl hydride	0257005		74-82-8
Methyl acetate	0261000	1231	79-20-9	Methyl hydroxide	0260003	1230	67-56-1
Methyl acetic acid	0345003	1848	79-09-4	Methyl iodide	0283000	2644	74-88-4
Methyl acetic ester	0261002	1231	79-20-9	Methyl isobutenyl ketone	1841003	1229	141-79-7
Methyl acetoacetate	1271000			Methyl isobutyl carbinol	0284000	2053	108-11-2
Methyl acetone	1272000	1232		Methyl isobutyl ketone	0285000	1245	108-10-1
Methyl acetylene	1273000			Methyl isocyanate	0286000	2480	624-83-9
Methyl acetylene-allene mixture	0262003	1060		Methyl isopropenyl ketone	0287000	1246	814-78-8
Methyl acetylene-propadiene mixture	0262000	1060		Methyl isopropyl ketone	0269003	2397	563-80-4
Methyl acrylate	0263000	1919	96-33-3	Methyl isothiocyanate	0288000	2477	556-61-6
Methyl acrylonitrile	0264000	3079	126-98-7	Methyl ketone	0004002	1090	67-64-1
Methyl alcohol	0260002	1230	67-56-1	Methyl mercaptan	0289000	1064	74-93-1
Methyl amyl acetate	1274000	1233		Methyl mercaptopropionaldehyde	1306000		
Methyl amyl alcohol	0284003	2053	108-11-2	Methyl mercuric dicyanamide	1307000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Methyl mercury	1308000			Methylene	0350001	1077	115-07-1
Methyl methacrylate	0290000	1247	80-62-6	Methylene acetone	0297002	1251	78-94-4
Methyl methane sulfonate	1309000			Methylene bichloride	0132001	1593	75-09-2
Methyl methanoate	0281002	1243	107-31-3	Methylene bis-(phenyl isocyanate) (or MBI)	1294000	2489	
Methyl monochloroacetate	0274002	2295	96-34-4	Methylene bromide	0126001	2664	74-95-3
Methyl mustard	0288002	2477	556-61-6	Methylene chloride	0132002	1593	75-09-2
Methyl n-butyrate	0272003	1237	623-42-7	Methylene cyanide	0254005	2647	109-77-3
Methyl nitrite	1311000	2455		Methylene cyanohydrin	0213005		107-16-4
Methyl orthosilicate	1314000	2606		Methylene dibromide	0126002	2664	74-95-3
Methyl oxide	0157002	1033	115-10-6	Methylene dichloride	0132003	1593	75-09-2
Methyl parathion	1315000	2783		Methylene diisocyanate	1296000		
Methyl PCT	0161002	2267	2524-03-0	Methylene oxide	0212006		50-00-0
Methyl pentyl ketone	0267004	1110	110-43-0	Methylethylamine	1297000		
Methyl phenkapton	1320000			Methylethylene	0350002	1077	115-07-1
Methyl phosphonic dichloride	0293000	9602	676-97-1	Methylhydrazine	0282000	1244	60-34-4
Methyl phosphonothioic dichloride	0294000	1760	676-98-2	Methylmethane	0173004		74-84-0
Methyl phosphonous dichloride	1321000	2845		Methyl-n-butanoate	0272002	1237	623-42-7
Methyl phosphorous dichloride	0294001	1760	676-98-2	Methylol	0260004	1230	67-56-1
Methyl propenoate	0263002	1919	96-33-3	Methyloxirane	0353003	1280	75-56-9
Methyl propionate	1324000	1248		Methylpentamethylene	0277002	2298	96-37-7
Methyl propyl ether	1325000	2612		Methylpentane	1316000	2462	
Methyl propyl ketone	1326000	1249		Methylpiperidine	1322000	2399	
Methyl rhodanate	0295001		556-64-9	Methyltetrahydrofuran	1329000	2536	
Methyl salicylate	1328000			Methyltrichloroacetate	1330000	2533	
Methyl styrene	0410001	2618	25013-15-4	Methyltrichloromethane	0389004	2831	71-55-6
Methyl sulfate	0162001	1595	77-78-1	Methyltrichlorosilane	0296000	1250	75-79-6
Methyl sulphydrate	0289003	1064	74-93-1	Metolachlor	1332000		
Methyl sulfide	0163003	1164	75-18-3	Metolcarb	1333000		
Methyl sulfocyanate	0295002		556-64-9	Mevinphos	1334000	2783	
Methyl tert-butyl ether	0270000	2398	1634-04-4	Mexacarbate	1335000	2757	
Methyl thiocyanate	0295000		556-64-9	MFA	0208004	2642	144-49-0
Methyl vinyl ether	0409003	1087	107-25-5	MFB	0209002	2387	462-06-6
Methyl vinyl ketone	0297000	1251	78-94-4	MIBC	0284005	2053	108-11-2
Methyl zinc	0164001	1370	544-97-8	MIBK	1830000		
Methylacryl chloride	0256002		920-46-7	MIC	0286003	2480	624-83-9
Methylaldehyde	0212005		50-00-0	Michler's ketone	1336000		
Methylamine (anhydrous)	0265000	1061	74-89-5	MIK	0285004	1245	108-10-1
Methylamine (solution)	0266000	1235	74-89-5	Mineral naphtha	0039004	1114	71-43-2
Methylaziridine	0352001	1921	75-55-8	Mineral oil	1337000		
Methylbenzene	0384001	1294	108-88-3	Mineral spirits	0299002		8030-30-6
Methylbenzol	0384002	1294	108-88-3	Miostat	0078008		51-83-2
Methylchloroform	0389003	2831	71-55-6	MIPK	0269004	2397	563-80-4
Methylcyclohexane	0276000	2296	108-87-2	Mirbane oil	1842004	1662	98-95-3
Methylcyclopentane	0277001	2298	96-37-7	Mirex	1338000		
Methyldichlorosilane	0279000	1242	75-54-7	MIT	0288003	2477	556-61-6

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
MITC	0288004	2477	556-61-6	m-Xylene	0412004	1307	
MMA	1832000			m-Xylene	0412009	1307	
MME	0290004	1247	80-62-6	Myrcene	1347000		
MMH	0282003	1244	60-34-4	N-(2-chlorophenylthiourea)	0098001		5344-82-1
MNBK	0271003	1224	591-78-6	N-(2-methylphenyl) thiourea	0292000		614-78-8
m-Nitrophenol	1339000			N,N'-bis(2-aminoethyl)- 1,2-ethanediamine	0393001	2259	112-24-3
m-Nitrophenol	1394000	1663		N,N'-Diacetyl benzidine	0827000		
m-Nitrotoluene	0310001	1664		N,N'-diacetyl benzidine	0843000		
Molecular oxygen	0315005		7782-44-7	N,N'-Dibutyl hexamethylene diamine	0856000		
Molten phosphorous	0331003		7723-14-0	N,N'-dibutyl hexamethylene diamine	0881000		
Molybdenum trioxide	1340000			N,N-diethyl aniline	0890000	2432	
Monoallylamine	0018003	2334	107-11-9	N,N'-diethylaniline	1069000		
Monobutylamine	0064003	1125	109-73-9	N,N-diethylethanamine	0392002	1296	121-44-8
Monochlorethane	0183002	1037	75-00-3	N,N-dimethyl carbamoyl chloride	0154005	2262	79-44-7
Monochlorobenzene	0093003	1134	108-90-7	N,N-dimethyl cyclohexylamine	1837000		
Monochloroethylene	0405003	1086	75-01-4	N,N-dimethyl formamide	0158003	2265	68-12-2
Monochloromethane	0273004	1063	74-87-3	N,N-dimethylacetamide	0151003		127-19-5
Monochlorotetrafluoroethane	1341000			N,N-dimethylaniline	0153000	2253	121-69-7
Monochlorotrifluoromethane	1342000			N,N-dimethyl-p-phenylenediamine	0160000		99-98-9
Monocrotaline	1343000			Nabam	1348000		
Monocrotophos	1344000			Nafenopin	1349000		
Monoethanolamine	0174003	2491	141-43-5	Naled	1350000		
Monoethylamine	0178004	1036	75-04-7	N-aminoethyl piperazine	0443000	2815	
Monoethyldichlorosilane	0187002	1183	1789-58-8	N-aminoethyl piperazine	0450000		
Monofluoroacetate	0208005	2642	144-49-0	n-Amyl acetate	0488000	1104	
Monofluorobenzene	0209003	2387	462-06-6	n-Amyl acetate	0489000	1107	
Monofluoroethene	0407004	1860	75-02-5	n-Amyl alcohol	0032001	1105	71-41-0
Monoisopropanolamine	0243004		78-96-6	n-Amyl alcohol	0032003	1105	71-41-0
Monomethylamine	0265001	1061	74-89-5	n-Amyl chloride	0490000	1111	
Monomethylhydrazine	0282004	1244	60-34-4	n-Amyl mercaptan	0491000	1112	
Morpholine	0298000	2054	110-91-8	n-Amyl nitrate	0492000	1113	
Motor fuel	0217002	1203	8006-61-9	n-Amyl nitrite	0493000		
Motor spirit	0217003	1203	8006-61-9	Naphtha	0299000		8030-30-6
Mous-con	0413001	1714		Naphtha: coal tar	1351000	2553	
Mouse-Rid	0361004	1692	57-24-9	Naphtha: stoddard solvent	1352000	1271	
MPTD	0294002	1760	676-98-2	Naphtha: VM & P	1353000		
MSF	0259002		558-25-8	Naphthalene	1354000	1334	
MTBE	0270003	2398	1634-04-4	Naphthylthiourea	1356000	1651	
m-Toluidine	0387002	1708		Naphthylurea	1357000	1652	
Muriatic acid	1827000			Naramycin	0117003		66-81-9
Muriatic ether	0183003	1037	75-00-3	Natural gas	1829000		
Mustard gas	1345000			Naturium	0356000	1428	7440-23-5
Muster	0218001		1071-83-6	n-Butane	0060001	1011	106-97-8
MVK	0297003	1251	78-94-4	n-Butanol	0603000	1120	
MVP (2-Methyl-5-vinyl pyridine)	1346000	3073		n-Butene	0066003	1012	25167-67-3

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
n-Butyl acetate	0061000	1123	123-86-4	Nickel tetracarbonyl	0301001	1259	13463-39-3
n-Butyl acrylate	0062002	2348	141-32-2	Nicotine	1372000	1654	
n-Butyl alcohol	0609000	1120		Nicotine sulfate	1373000	1658	
n-Butyl bromide	0056002	1126	109-65-9	Nitrador	0167004	1598	534-52-1
n-Butyl carbinol	0032004	1105	71-41-0	Nitralin	1374000		
n-Butyl chloroformate	0616000	2743		Nitric acid (fuming)	0302000	2032	7697-37-2
n-Butyl isocyanate	0069000	2485	111-36-4	Nitric acid (nonfuming, >40%)	0302001	2031	7697-37-2
n-Butyl mercaptan	0070003	2347	109-79-5	Nitric oxide	0303000	1660	10102-43-9
n-Butyl methacrylate	0622000	2227		Nitric oxide (mixture with nitrogen tetroxide)	0303001	1975	10102-43-9
n-Butylamine	0064000	1125	109-73-9	Nitrioltriactic acid	1375000		
n-Butylaniline	0612000	2738		Nitrioltriactic acid, disodium salt	1376000		
n-Butylchloride	0094002	1127	109-69-3	Nitrioltriactic acid, sodium salt	1377000		
n-Butylene	0066005	1012	25167-67-3	Nitrioltriactic acid, trisodium salt	1378000		
n-Butyric acid	0631000	2820		Nitrobenzene	1842000	1662	98-95-3
n-Decyl acrylate	0817000			Nitrobenzol	1842002	1662	98-95-3
n-Decyl alcohol	0818000			Nitrocarbol	0307001	1261	75-52-5
n-Decyl benzene	0819000			Nitrocellulose (with >25% Water)	1383000	2555	
n-Dipropylamine	0170002	2383	142-84-7	Nitrocellulose (with plasticizer >18%)	1384000	0343	
Nemex	0135005	2047	542-75-6	Nitrochlorobenzene	0097005	1578	
Neodecanoic acid	1358000			Nitrochloroform	0099001	1580	76-06-2
Neohexane	0300000	1208	75-83-2	Nitrocresols	1385000	2446	
Neon	1359000	1065		Nitrocyclohexane	1386000		
Neoprene	0100005	1991	126-99-8	Nitroethane	1387000	2842	
N-ethyl butylamine	0181002	2734	13360-63-9	Nitrofan	0167005	1598	534-52-1
N-ethyl cyclohexylamine	1039000			Nitrofen	1388000		
N-ethylaniline	1028000	2272		Nitrogen chloride oxide	0309001	1069	2696-92-6
N-ethylbutylamine	0181003	2734	13360-63-9	Nitrogen dioxide	0305000	1067	10102-44-0
N-formyldimethylamine	0158004	2265	68-12-2	Nitrogen gas	0304002		7727-37-9
n-Heptane	0219001	1206	142-82-5	Nitrogen liquid	0304003		7727-37-9
n-Heptene	0220000	2278	592-76-7	Nitrogen monoxide	0303002	1660	10102-43-9
n-Hexaldehyde	1146000	1207		Nitrogen mustard	1389000		
n-Hexane	0221002	1208	110-54-3	Nitrogen mustard hydrochloride	1390000		
Nickel	1360000	2881		Nitrogen mustard N-oxide	1391000		
Nickel acetate	1361000			Nitrogen mustard N-oxide hydrochloride	1392000		
Nickel ammonium sulfate	1362000	9138		Nitrogen oxide	0303004		
Nickel bromide	1363000			Nitrogen oxychloride	0309002	1069	2696-92-6
Nickel carbonyl	0301000	1259	13463-39-3	Nitrogen tetroxide	0305002	1067	10102-44-0
Nickel chloride	1364000			Nitrogen trifluoride	1393000	2451	
Nickel cyanide	1365000	1653		Nitrogen (compressed gas)	0304000	1066	7727-37-9
Nickel fluoroborate	1366000			Nitrogen (refrigerated liquid)	0304001	1977	7727-37-9
Nickel formate	1367000			Nitroglycerin	0306000	0143	55-63-0
Nickel hydroxide	1368000	9140		Nitroglycerin (1-10% solution in alcohol)	0306001	0144	55-63-0
Nickel nitrate	1369000	2725		Nitromethane	0307000	1261	75-52-5
Nickel subsulfide	1370000			Nitrophen	0168007		51-28-5
Nickel sulfate	1371000			Nitropropane	0308000	2608	

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Nitro-Sil	0024004	1005	7664-41-7	n-Propyl nitrate	1543000	1865	
Nitrostarch	1403000	0146		n-Undecylbenzene	1757000		
(dry or wetted with < 20% water)				n-Undecylbenzene	1762000		
Nitrostarch (wetted with >20% water)	1404000	1337		o-Aminopyridine	0023005	2671	
Nitrosyl chloride	0309000	1069	2696-92-6	o-Anisidine	0495000	2431	
Nitrosylsulfuric acid	1405000	2308		o-Anisidine hydrochloride	0496000		
Nitrotoluene	0310000	1664		o-Chloronitrobenzene	0097003	1578	
Nitrous acid, ethyl ester	0203002	1194	109-95-5	o-Chloronitrobenzene	0097006	1578	
Nitrous oxide (compressed gas)	0311000	1070	10024-97-2	o-Chlorophenol	0704000	2021	
Nitrous oxide (cryogenic liquid)	0311001	2201	10024-97-2	Octachloronaphthalene	1427000		
N-methylaniline	1275000	2294		Octamethyl diphosphoramide	1428000		
N-methylaniline	1285000			Octane	0312000	1262	111-65-9
N-methyl-methanamine	0152001	1032	124-40-3	Octanoic acid	1429000		
N-nitrosodiethanolamine	1406000			Octanol	1430000		
N-nitrosodiethylamine	1407000			Octene	0313000		111-66-0
N-nitrosodimethylamine	1408000			Octyl epoxy tallate	1431000		
N-nitrosodi-n-butylamine	1409000			Octylene	0313003		111-66-0
N-nitrosodi-n-propylamine	1410000			o-Dinitrobenzene	0166005	1597	
N-nitrosodiphenylamine	1411000			Oil of bitter almonds	1842006	1662	98-95-3
N-nitrosomethylethylamine	1412000			Oil of turpentine	0400001	1299	8006-64-2
N-nitrosomethylvinylamine	1413000			Oil of vitrol	0368002	1830	7664-93-9
N-nitrosomorpholine	1414000			Olamine	0174004	2491	141-43-5
N-nitroso-N-ethyl urea	1415000			Oleic acid	1434000		
N-nitroso-N-methyl urea	1416000			Oleic acid, potassium salt	1435000		
N-nitroso-N-methyl urethane	1417000			Oleic acid, sodium salt	1436000		
N-nitrososarcosine	1418000			Oleum	0314000	1831	8014-95-7
N-nitrosopiperidine	1419000			o-Nitrobenzene	1842005	1662	98-95-3
N-nitrosopyrrolidine	1420000			o-Nitrophenol	1395000	1663	
N-nitrososarcosine	1421000			o-Nitrophenol	1433000		
NO	0303003	1660	10102-43-9	o-Nitrotoluene	0310005	1664	
n-Octane	0312001	1262	111-65-9	o-Phenyl phenate, sodium	1470000		
Nonane	1422000	1920		o-Phenyl phenate, sodium	1476000		
Nonanol	1423000			o-Phenyl phenol	1471000		
Nonene	1424000	2057		o-Phenyl phenol	1477000		
Nonylphenol	1425000			Orange oil SS	1437000		
Norbormide	1426000			Ordram (or molinate)	1438000		
Norethisterone	0037004	2188	7784-42-1	ortho-Xylene	0412006	1307	
n-Pentane	0321001	1265	109-66-0	Orvinylecarbinol	0017004	1098	107-18-6
N-phenylthiourea	0328001	2767	103-85-5	Osmium tetroxide	1439000	2471	
N-phosphonomethylglycine	0218002		1071-83-6	o-Toluidine	0387003	1708	
N-propanolamine	1509000			o-Tolyl thiourea	0292002		614-78-8
N-propanolamine	1529000			Oxacyclopentadiene	0215002	2389	110-00-9
n-Propyl acetate	0347000	1276	109-60-4	Oxacyclopentane	0379003	2056	109-99-9
n-Propyl benzene	0348000	2364	103-65-1	Oxalic acid	1440000		
n-Propyl chloroformate	0349000	2740	109-61-5	Oxalonitrile	0109005	1026	460-19-5
n-Propyl mercaptan	0342003	2402	107-03-9				

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Oxalyl cyanide	0109006	1026	460-19-5	PDB	0128005	1592	106-46-7
Oxammonium	0235001		7803-49-8	p-Dichlorobenzene	0128000	1592	106-46-7
Oxamyl	1441000			Penta-2,4-dione	0320000	2310	123-54-6
Oxane	0199006	1040	75-21-8	Pentaborane	0317000	1380	19642-22-7
Oxetanone	0149005	2521	674-82-8	Pentaborane monohydride	0317001	1380	19642-22-7
Oxide of nitrogen	0305003	1067	10102-44-0	Pentacarbonyliron	0237002	1994	13463-40-6
Oxidoethane	0199007	1040	75-21-8	Pentachlorodibenzo-p-dioxins	1454000		
Oxirane	0199008	1040	75-21-8	Pentachloroethane	1455000	1669	
Oxyacyclopropane	0199009	1040	75-21-8	Pentachlorophenate, sodium	1456000	2567	
Oxybenzene	0323006		108-95-2	Pentachlorophenol	0318000	3155	87-86-5
Oxydisulfoton	1397000			Pentadecanol	1457000		
Oxygen difluoride	0316000	2190	7783-41-7	Pentadecylamine	1458000		
Oxygen (compressed gas)	0315000	1072	7782-44-7	Pentadione	0320004	2310	123-54-6
Oxygen (refrigerated liquid)	0315001	1073	7782-44-7	Pentaerythritol	1459000		
o-Xylene	0412007	1307		Pentamethylene	0119001	1146	142-29-0
Oxymethylene	0212007		50-00-0	Pentane	0321000	1265	109-66-0
Ozone	1442000			Pentanoic acid	1460000	1760	
Paint thinner	1445000	1263		Pentyltrichlorosilane	0033001	1728	107-72-2
Paint, latex	1443000			Peracetic acid	1463000	2131	
Paint, oil base	1444000	1263		PERC	0375003	1897	127-18-4
p-Aminopyridine	0023006	2671		Percarbamide	0401003	1511	124-43-6
p-Aminopyridine	0023008	2671		Perchlor	0375004	1897	127-18-4
Panfuran S	1446000			Perchloric acid	0322000	1873	7601-90-3
p-Anisidine	0497000	2431		Perchloroethylene	0375005	1897	127-18-4
Paraformaldehyde	1447000	2213		Perchloromethyl mercaptan	1464000	1670	
Paraldehyde	1448000	1264		Perchloryl fluoride	1465000	3083	
Paramoth	0128003	1592	106-46-7	Perclene	0375006	1897	127-18-4
Paraquat	1449000	2781		Perfluoroethylene	0378001	1081	116-14-3
Paraquat methosulfate	1450000			Petrol	0217004	1203	8006-61-9
Parathion	1451000	2783		Petrolatum	1466000		
para-Xylene	0412008	1307		Petroleum	0299003		8030-30-6
Parazene	0128004	1592	106-46-7	Petroleum distillate	0299004		8030-30-6
Paris green	1452000	1585		Petroleum ether	0299005		8030-30-6
p-Benzoquinone	0041002	2587	106-51-4	Petroleum gas, liquified	0252003	1075	68476-85-7
PCE	0375002	1897	127-18-4	Petroleum naphtha	1467000	1255	
p-Chloro -m-cresol	0727000			Petroleum solvent	0299006		8030-30-6
p-Chloroaniline	0691000	2018		Phenanthrene	1468000		
p-Chloro-m-cresol	0694000			Phenic acid	0323007		108-95-2
p-Chloronitrobenzene	0097004	1578		Phenol trinitrate	0336003		88-89-1
p-Chloronitrobenzene	0097007	1578		Phenol (molten)	0323000	2312	108-95-2
p-Chloro-o-toluidine	0717000			Phenol (solid)	0323001	1671	108-95-2
p-Chlorotoluene	0104004	2238	106-43-4	Phenol (solution)	0323002	2821	108-95-2
PCP	0318002	3155	87-86-5	Phenyl alcohol	0323008		108-95-2
p-Cresidine	0785000			Phenyl bromide	0055001	2514	108-86-1
p-Cymene	0808000	2046		Phenyl chloride	0093004	1134	108-90-7

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Phenyl ethylene	0362003	2055	100-42-5	Phosphorus pentasulfide	0333000	1340	1314-80-3
Phenyl fluoride	0209004	2387	462-06-6	Phosphorus pentoxide	1490000	1807	
Phenyl isocyanate	1474000	2487		Phosphorus persulfide	0333003	1340	1314-80-3
Phenyl mercaptan	0326000	2337	108-98-5	Phosphorus tribromide	0334000	1808	7789-60-8
Phenyl phosphorous dichloride	0327000	2798	644-97-3	Phosphorus trichloride	0335000	1809	7719-12-2
Phenyl phosphorous thiodichloride	1478000	2799		Phosphorus trihydride	0330003	2199	7803-51-2
Phenyl silatrane	1479000			Phosphorus trioxide	1491000	2578	
Phenyl trichloromethane	0042004	2226	98-07-7	Phosphorus (amorphous, red)	1486000	1338	
Phenylacetoneitrile	0324000	2470	140-29-4	Phosphorus (dry or under water)	0331000	1381	7723-14-0
Phenylamine	0035006	1547	62-53-3	Phosphorus (white molten)	0331001	2447	7723-14-0
Phenylarsinedichloride	0325002	1556	696-28-6	Phosphoryl chloride	0332004	1810	10025-87-3
Phenylcarboxamide	0038003			Phosvin	0413002	1714	
Phenylcarbylamine chloride	1469000	1672		Phthalic anhydride	1492000	2214	
Phenylcyanide	0040003	2224	100-47-0	Pic-chlor	0099002	1580	76-06-2
Phenyldichloroarsine	0325000	1556	696-28-6	Picfume	0099003	1580	76-06-2
Phenylenediamine	1472000	1673		Picoline	1493000	2313	
Phenylethane	0179002	1175	100-41-4	Picral	0336004		88-89-1
Phenylhydrazine hydrochloride	1473000			Picric acid (>10% water)	0336000	1344	88-89-1
Phenylic acid	0323009		108-95-2	Picric acid (dry or <30% water)	0336001	0154	88-89-1
Phenylmercuric acetate	1475000	1674		Picride	0099004	1580	76-06-2
Phenylmethane	0384003	1294	108-88-3	Picrotoxin	1494000	1584	
Phenylphosphine dichloride	0327003	2798	644-97-3	Pimelic ketone	0116005	1915	108-94-1
Phenylthiocarbamide	0328002	2767	103-85-5	Pine oil	1495000		
Phenylthiourea	0328000	2767	103-85-5	Pinene	0337001	2368	80-56-8
Phorate	1480000	3018		Piperazine	1496000	2579	
Phosacetim	1481000			Piperidine	0338000	2401	110-89-4
Phosfolan	1482000	2783		Piperylene	0319002		504-60-9
Phosgen	0329006	1076	75-44-5	Piprotal	1497000		
Phosgene	0329000	1076	75-44-5	Platinum tetrachloride	1498000		
Phosmet	1483000			p-Nitrobenzene	1842003	1662	98-95-3
Phosphamidon	1484000			p-Nitrophenol	1396000	1663	
Phosphine	0330000	2199	7803-51-2	p-Nitrotoluene	0310006	1664	
Phosphoric acid	1485000	1805		Polybrominated biphenyls	1499000	3152	
Phosphoric sulfide	0333002	1340	1314-80-3	Polybutene	1500000		
Phosphorochloridithioic acid, 0,0-dimethyl ester	0161003	2267	2524-03-0	Polychlorinated biphenyls	1501000	2315	
Phosphorus (black)	1487000			Polyethylene polyamines	1502000		
Phosphorus bromide	0334001	1808	7789-60-8	Polyphosphoric acid	1503000		
Phosphorus chloride	0335002	1809	7719-12-2	Polypropylene	1504000		
Phosphorus chloride oxide	0332001	1810	10025-87-3	Polypropylene glycol	1505000		
Phosphorus hydride	0330002	2199	7803-51-2	Polypropylene glycol methyl ether	1506000		
Phosphorus oxide trichloride	0332002	1810	10025-87-3	Ponceau 3R	1507000		
Phosphorus oxychloride	0332000	1810	10025-87-3	Potassium	0339000	2257	7440-09-7
Phosphorus oxytrichloride	0332003	1810	10025-87-3	Potassium arsenite	1508000	1678	
Phosphorus pentachloride	1488000	1806		Potassium binoxalate	1510000		
Phosphorus pentafluoride	1489000	2198		Potassium bromate	1511000	1484	

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Potassium chlorate	1512000	1485		Propoxur	1534000		
Potassium chromate	1513000			Propyl bromide	0057002	2344	75-26-3
Potassium cyanide	1514000	1680		Propyl chlorocarbonate	0349001	2740	109-61-5
Potassium dichloro-s-triazinetriene	1515000	2465		Propyl chloroformate	0349002	2740	109-61-5
Potassium dichromate	1516000	1479		Propyl cyanide	0074003	2411	109-74-0
Potassium hydroxide	1517000	1813		Propyl mercaptan	0342002	2402	107-03-9
Potassium hydroxide solution	1518000	1814		Propylacetone	0271004	1224	591-78-6
Potassium iodide	1519000			Propylamine	1535000	1277	
Potassium oxalate	1520000			Propylene	0350000	1077	115-07-1
Potassium permanganate	1521000	1490		Propylene butylene polymer	1536000		
Potassium peroxide	1522000	1491		Propylene dichloride	0351000	1279	78-87-5
Potassium peroxydisulfate	0340003	1492	7727-21-1	Propylene glycol	1538000		
Potassium persulfate	0340000	1492	7727-21-1	Propylene glycol ethyl ether	1539000		
Potassium silver cyanide	1523000			Propylene glycol methyl ether	1540000		
Progesterone	1524000			Propylene glycol monomethacrylate	0236002		27813-02-1
Promecarb	1525000			Propylene oxide	0353000	1280	75-56-9
Prometryne	1526000			Propylene tetramer	1541000	2850	
Propadiene	1527000	2200		Propylene trimer	1542000	2057	
Propane	0341000	1978	74-98-6	Propyleneimine	0352000	1921	75-55-8
Propane sultone	1528000			Propylnitrile	0346004	2404	107-12-0
Propanethiol	0342000	2402	107-03-9	Propynyl alcohol	0343004	1986	107-19-7
Propanoic acid	0345004	1848	79-09-4	Prothoate	1544000	2783	
Propargite	1530000			Prozoin	0345005	1848	79-09-4
Propargyl alcohol	0343000	1986	107-19-7	Prussic acid	0230004	1051	74-90-8
Propargyl bromide	0058002	2345	106-96-7	Prussite	0109007	1026	460-19-5
Propellant 12	1531000	1028		p-tert-Butyl phenol	0628000	2229	
Propenamide	0011002	2074	79-06-1	p-Toluene sulfonic acid	1689000	2585	
Propene	0350003	1077	115-07-1	p-Toluene sulfonic acid	1818000		
Propene acid	0012005	2218	79-10-7	p-Toluidine	0387004	1708	
Propene oxide	0353004	1280	75-56-9	p-Tolyl chloride	0104005	2238	106-43-4
Propene-3-yl trichlorosilane	0022002	1724	107-37-9	p-Tricresyl phosphate	1717000		
Propenenitrile	0013003	1093	107-13-1	PTU	0328004	2767	103-85-5
Propenoic acid	0012006	2218	79-10-7	p-Xylene	0412010	1307	
Propenoic acid, ethyl ester	0176004	1917	140-88-5	Pyrene	1545000		
Propenoic acid, methyl ester	0263004	1919	96-33-3	Pyrethrins	1546000	9184	
Propenol	0017005	1098	107-18-6	Pyridine	0354000	1282	110-86-1
Propenoyl chloride	0014003	9188	814-68-6	Pyriminil	1547000		
Propenyl alcohol	0017007	1098	107-18-6	Pyrogalllic acid	1548000		
Propenyl chloride	0020005	1100	107-05-1	Pyrophosphoric acid, tetraethyl ester	0377004		107-49-3
Propiolactone	0344000	1993	57-57-8	Pyrosulfuryl chloride	1549000	1817	
Propionaldehyde	1532000	1275		Pyrrolidone	1550000		
Propionic acid	0345000	1848	79-09-4	Quinoline	1552000	2656	
Propionic anhydride	1533000	2496		Quinone	0041004	2587	106-51-4
Propionic nitrile	0346003	2404	107-12-0	R12	1555001	1028	
Propionitrile	0346000	2404	107-12-0	R20	0096004	1888	67-66-3

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
R22	1556001	1018		Silver carbonate	1578000		
R40	0273005	1063	74-87-3	Silver iodate	1579000		
R50	0257006		74-82-8	Silver nitrate	1580000	1493	
Range oil	0249004	1223	8008-20-6	Silver oxide	1581000		
Ratal	0413003	1714		Silver sulfate	1582000		
Refrigerant 12	1555000	1028		Silvex	1583000	2765	
Refrigerant 22	1556000	1018		Simazine	1584000		
Refrigerant R717	0024005	1005	7664-41-7	Sinox	0167006	1598	534-52-1
Resorcinol	1557000	2876		Skellysolve A	0321002	1265	109-66-0
Rodeo	0218003		1071-83-6	Soda lye	0359005		1310-73-2
Ro-Dex	0361005	1692	57-24-9	Sodium	0356001	1428	7440-23-5
Roundup	0218004		1071-83-6	Sodium 2-mercaptobenzothiazol solution	1607000		
Rubbing alcohol	0242007	1219	67-63-0	Sodium alkyl sulfates	1586000		
Rubidium	1558000	1423		Sodium alkylbenzene sulfonates	1585000		
Saccharin	1559000			Sodium amide	1587000		
Safrole	1560000			Sodium arsenate	1588000	1685	
Salicylaldehyde	1561000			Sodium arsenite	1589000	2027	
Salicylic acid	1562000			Sodium azide	0357000	1687	26628-22-8
Salt peter	1563000	1942		Sodium bifluoride	1590000	2439	
Sand acid	0210005	1778	16961-83-4	Sodium bisulfite	1591000	2693	
Sarin	1564000			Sodium borate	1592000		
sec-Butanol	0604000	1120		Sodium borohydride	1593000	1426	
sec-Butyl alcohol	0610000	1120		Sodium borohydride (15% or less)	1594000		
sec-Butylamine	0611000			Sodium cacodylate	1595000	1688	
sec-Propyl alcohol	0242006	1219	67-63-0	Sodium chlorate	1596000	1495	
Selenic acid	1565000	1905		Sodium chlorate solution	1597000	2428	
Selenium (powder)	1566000	2658		Sodium chromate	1598000		
Selenium dihydride	0233002	2202	7783-07-5	Sodium cyanide	0358000	1689	143-33-9
Selenium dioxide	1567000	2811		Sodium dichloro-s-triazinetriene	1599000	2465	
Selenium hexafluoride	1568000	2194		Sodium dichromate	1600000	1479	
Selenium oxychloride	1569000	2879		Sodium ferrocyanide	1601000		
Selenium trioxide	1570000			Sodium fluoride	1602000	1690	
Semicarbazide hydrochloride	1571000			Sodium fluoroacetate	1603000	2629	
Sewer gas	0234002	1053	7783-06-4	Sodium fluorosilicate	1604000	2674	
Sextone	0116006	1915	108-94-1	Sodium hydrate	0359006		1310-73-2
Silane	1572000	2203		Sodium hydride	1605000	1427	
Silica gel	1574000			Sodium hydrosulfide solution	1606000	2922	
Silica, crystalline	1573000			Sodium hydroxide (dry)	0359000	1823	1310-73-2
Silicochloroform	0391001	1295	10025-78-2	Sodium hydroxide (solution)	0359001	1824	1310-73-2
Silicofluoric acid	0210006	1778	16961-83-4	Sodium hypochlorite	0360000	1791	7681-52-9
Silicon chloride	0355000	1818	10026-04-7	Sodium hypochlorite solution	0360006	1791	7681-52-9
Silicon tetrachloride	0355001	1818	10026-04-7	Sodium methylate	1608000	1431	
Silicon (powder)	1575000	1346		Sodium nitrate	1609000	1498	
Silver	1576000			Sodium nitrite	1610000	1500	
Silver acetate	1577000			Sodium oxalate	1611000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Sodium perchlorate	1612000	1502		Sulfur dichloride	0366000	1828	10545-99-0
Sodium persulfate	1613000			Sulfur dioxide	0367000	1079	7446-09-5
Sodium phosphate	1614000	9147		Sulfur hydride	0234004	1053	7783-06-4
Sodium phosphate tribasic	1615000			Sulfur monochloride	0369000	1828	10025-67-9
Sodium phosphide	1616000	1432		Sulfur oxide	0367005	1079	7446-09-5
Sodium saccharin	1617000			Sulfur oxychloride	0372003	1834	7791-25-5
Sodium selenate	1618000	2630		Sulfur pentafluoride	1637000		
Sodium selenite	1619000	2630		Sulfur phosphide	0333004	1340	1314-80-3
Sodium silicate	1620000			Sulfur subchloride	0369004	1828	10025-67-9
Sodium sulfate	1621000			Sulfur tetrafluoride	0370000	2418	7783-60-0
Sodium sulfide	1622000	1385		Sulfur trioxide	0371000	1829	7446-11-9
Sodium sulfite	1623000			Sulfur (molten)	0365001	2448	7704-34-9
Sodium tellurite	1624000			Sulfureted hydrogen	0234003	1053	7783-06-4
Sodium thiocyanate	1625000			Sulfuric acid	0368000	1830	7664-93-9
Solvent 111	0389005	2831	71-55-6	Sulfuric acid, dimethyl ester	0162002	1595	77-78-1
Sorbitol	1626000			Sulfuric acid, fuming	0314003	1831	8014-95-7
Spirits of turpentine	0400002	1299	8006-64-2	Sulfuric anhydride	0371003	1829	7446-11-9
Stannous fluoride	1627000			Sulfuric chlorohydrin	0103002	1454	7790-94-5
Stearic acid	1628000			Sulfuric oxide	0371004	1829	7446-11-9
Sterigmatocystin	1629000			Sulfuric oxychloride	0372002	1834	7791-25-5
s-Tetrachloroethane	0374004	1702	79-34-5	Sulfurous acid	1636000	1833	
Stibine	1630000	2676		Sulfurous acid anhydride	0367002	1079	7446-09-5
Stoddard solvent	0299007		8030-30-6	Sulfurous acid, diammonium salt	0030002	9090	10196-04-0
Strontium chromate	1631000			Sulfurous anhydride	0367003	1079	7446-09-5
Strychnine	0361000	1692	57-24-9	Sulfurous oxide	0367004	1079	7446-09-5
Strychnine sulfate	1632000	1692		Sulfurous oxychloride	0381003	1836	7719-09-7
Styrene	0362000	2055	100-42-5	Sulfuryl chloride	0372000	1834	7791-25-5
Styrene monomer	0362004	2055	100-42-5	Supracide	1638000		
Styrene oxide	0363000		96-09-3	Sweet spirit of nitre	0203003	1194	109-95-5
Styrene-7,8-oxide	0363003		96-09-3	sym-Allene	0451000		
Styrol	0362005	2055	100-42-5	Tabun	1639000		
Styrolene	0362006	2055	100-42-5	Tannic acid	1640000		
Suberane	0114002	2241	291-64-5	Tar	1641000	1999	
Sucrose	1633000			t-Butanol	0063001	1120	75-65-0
Sulfallate	1634000			t-Butyl alcohol	0063000	1120	75-65-0
Sulfan	0371001	1829	7446-11-9	t-Butyl methyl ether	0270001	2398	1634-04-4
Sulfinyl chloride	0381001	1836	7719-09-7	t-Butylamine	0065000	2734	75-64-9
Sulfolane	0364000		126-33-0	TCE	0390003	1710	79-01-6
Sulfolane W	0364002		126-33-0	TCM	0096005	1888	67-66-3
Sulfonyl chloride	0372001	1834	7791-25-5	TDI	0386001	2078	584-84-9
Sulfotep	1635000	1704		TEA	0392003	1296	121-44-8
Sulfur	0365000	1350	7704-34-9	TEL	0376001	1649	78-00-2
Sulfur anhydride	0371002	1829	7446-11-9	Tellurium fluoride	0373001	2195	7783-80-4
Sulfur chloride	0369003	1828	10025-67-9	Tellurium hexafluoride	0373000	2195	7783-80-4
Sulfur chloride oxide	0381002	1836	7719-09-7	Tellurium (powder)	1642000		

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Telmicid	0171003		514-73-8	Tetramethyl lead	1663000		
Telmid	0171004		514-73-8	Tetramethyl silane	1664000	2749	
Telone 2	0135006	2047	542-75-6	Tetramethylene cyanide	0015004	2205	111-69-3
Telone C	0135007	2047	542-75-6	Tetramethylene oxide	0379004	2056	109-99-9
Temik	0016003	2757	116-06-3	Tetramethylene sulfone	0364004		126-33-0
TEN	0392004	1296	121-44-8	Tetran	0380001	1510	509-14-8
TEP	0377005		107-49-3	Tetranitromethane	0380000	1510	509-14-8
TEPP	0377006		107-49-3	Tetrasol	0083006	1846	56-23-5
Terbufos	1643000			Thallium	1665000		
Terephthalic acid	1644000			Thallium acetate	1666000		
Terphenyl	1645000			Thallium carbonate	1667000		
Terpinoline	1646000	2541		Thallium nitrate	1668000	2727	
tert-Butyl ether	0620000	1149		Thallium sulfate	1669000	1707	
tert-Butyl hydroperoxide	0068000		75-91-2	Thalious carbonate	1670000		
tert-Butyl peroxybenzoate	0625000	2097		Thalious chloride	1671000		
tert-Butylamine	0065002	2734	75-64-9	Thalious malonate	1672000		
tert-Octyl mercaptan	1432000	3023		Thalious sulfate	1673000		
Testosterone and its esters	1647000			THF	0379005	2056	109-99-9
TETA	0393002	2259	112-24-3	Thioacetamide	1675000		
Tetrabutyl titanate	1648000			Thioacetic acid	1676000	2436	
Tetracarbonyl nickel	0301002	1259	13463-39-3	Thiobencarb	1677000		
Tetrachloroethane	0374000	1702	79-34-5	Thiobutyl alcohol	0070004	2347	109-79-5
Tetrachloroethylene	0375000	1897	127-18-4	Thiocarbamide	0382002		62-56-6
Tetrachloromethane	0083005	1846	56-23-5	Thiocarbazide	1678000		
Tetrachlorosilane	0355002	1818	10026-04-7	Thiocyanic acid, ethyl ester	0205003		542-90-5
Tetrachlorotitanium	0383001	1838	7550-45-0	Thiocyanomethane	0295003		556-64-9
Tetrachlorvinphos	1651000			Thioethanol	0202004	2363	75-08-1
Tetradecanol	1652000			Thioethyl alcohol	0202005	2363	75-08-1
Tetradecyl benzene	1654000			Thiofanox	1680000		
Tetraethyl dithiopyrophosphate	1655000	1704		Thiolane-1,1-dioxide	0364005		126-33-0
Tetraethyl lead	0376000	1649	78-00-2	Thiomethyl alcohol	0289004	1064	74-93-1
Tetraethyl pyrophosphate (liquid)	0377001	3018	107-49-3	Thionazin	1681000	3018	
Tetraethyl pyrophosphate (solid)	0377000	2783	107-49-3	Thionyl chloride	0381000	1836	7719-09-7
Tetraethyl tin	1658000			Thiophan sulfone	0364006		126-33-0
Tetraethylene glycol	1656000			Thiophenol	0326003	2337	108-98-5
Tetraethylene pentamine	1657000	2320		Thiophosgene	1682000	2474	
Tetraethylplumbane	0376002	1649	78-00-2	Thiophosphoric anhydride	0333005	1340	1314-80-3
Tetrafluoroethylene	0378000	1081	116-14-3	Thiosemicarbazide	1683000		
Tetrafluorohydrazine	1659000	1955		Thiourea	0382000		62-56-6
Tetrafluoromethane	1660000	1982		Thiourea (2-chlorophenyl)	0098002		5344-82-1
Tetrafluorosulfurane	0370001	2419	7783-60-0	Thiram	1684000	2771	
Tetrahydro-1,4-oxazine	0298004	2054	110-91-8	Thorium dioxide	1685000		
Tetrahydrofuran	0379000	2056	109-99-9	Thorium nitrate	1686000	2976	
Tetrahydronaphthalene	1661000			TIBAL	0395002		100-99-2
Tetrahydrothiophene-1	0364003		126-33-0	Titanium chloride	0383002	1838	7550-45-0

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Titanium dioxide	1687000			Trichloroethenylsilane	0411002	1305	75-94-5
Titanium tetrachloride	0383000	1838	7550-45-0	Trichloroethyl silicon	0206002	1196	115-21-9
Titanium(IV) chloride	0383003	1838	7550-45-0	Trichloroethylene	0390000	1710	79-01-6
TL 214	0186004	1892	598-14-1	Trichloroethylsilane	0206001	1196	115-21-9
TL 69	0325003	1556	696-28-6	Trichlorofluoromethane	1704000		
TMA	0397001	1083	75-50-3	Trichloroform	0096006	1888	67-66-3
TNM	0380002	1510	509-14-8	Trichloromethane	0096007	1888	67-66-3
TNT (dry or wetted with<30% water)	1688000	0209		Trichloromethyl benzene	0042005	2226	98-07-7
Toluene	0384000	1294	108-88-3	Trichloromethylsilane	0296001	1250	75-79-6
Toluene 2,4-diisocyanate	0386003	2078	584-84-9	Trichloromethylsilicon	0296002	1250	75-79-6
Toluene diamine	0385003	1709	95-80-7	Trichloromonosilane	0391002	1295	10025-78-2
Toluene diisocyanate	0386000	2078	584-84-9	Trichloronate	1705000		
Toluene-2,4-diamine	0385004	1709	95-80-7	Trichloronitromethane	0099005	1580	76-06-2
Toluidine	0387000	1708		Trichlorophenyl silane	1711000		
Toluol	0384005	1294	108-88-3	Trichlorophosphine	0335003	1809	7719-12-2
Tolu-sol	0384004	1294	108-88-3	Trichlorosilane	0391000	1295	10025-78-2
Toxaphene	1690000	2761		Trichloro-s-triazinetriene	1713000	2468	
trans-2-Butenal	0106002	1143	4170-30-3	Trichlorotoluene	0042006	2226	98-07-7
trans-Butene	0066004	1012	25167-67-3	Trichlorotrifluoroethane	1714000		
Tri	0389006	2831	71-55-6	Trichlorovinylsilicon	0411003	1305	75-94-5
TRI	0390004	1710	79-01-6	Tri-clor	0099006	1580	76-06-2
Triamiphos	1692000			Tridecane	1718000		
Triaziquone	1693000			Tridecanol	1719000		
Triazofos	1694000			Tridecyl benzene	1721000		
Tribromoborane	0048002	2692	10294-33-4	Trien	0393003	2259	112-24-3
Tribromophosphine	0334002	1808	7789-60-8	Triethane	0389007	2831	71-55-6
Tributyl phosphate	1696000			Triethanol amine	1722000		
Tributylamine	1695000	2542		Triethoxysilane	1723000		
Tricarbonyl methyl cyclopentadienyl manganese	1697000			Triethyl aluminum	1724000		
Trichlor	0390005	1710	79-01-6	Triethyl benzene	1725000		
Trichlorfon	1698000	2783		Triethyl phosphate	1728000		
Trichloro-(chloromethyl) silane	1703000			Triethyl phosphite	1729000	2323	
Trichloroacetaldehyde	0086002	2075	75-87-6	Triethylamine	0392000	1296	121-44-8
Trichloroacetic acid	1699000	1839		Triethylene glycol	1726000		
Trichloroacetic acid chloride	0388001	2442	76-02-8	Triethylene thiophosphoramidate	1727000		
Trichloroacetyl chloride	0388000	2442	76-02-8	Triethylenetetramine	0393000	2259	112-24-3
Trichloroallylsilane	0022003	1724	107-37-9	Trifluoroacetic acid	1730000	2699	
Trichloroamylsilane	0033002	1728	107-72-2	Trifluoroboron	0050002	1008	7637-07-2
Trichlorobenzene	1700000	2321		Trifluorochlorine	0089003	1749	7790-91-2
Trichloroborane	0049002	1741	10294-34-5	Trifluorochloroethylene	0394000	1082	79-38-9
Trichloroboron	0049003	1741	10294-34-5	Trifluorovinyl chloride	0394004	1082	79-38-9
Trichlorobutene	1702000	2322		Trifluralin	1732000		
Trichlorobutylsilane	0071002	1747	7521-80-4	Triisobutyl aluminum	0395000		100-99-2
Trichloroethanal	0086003	2075	75-87-6	Triisobutylalane	0395003		100-99-2
Trichloroethene	0390006	1710	79-01-6	Triisobutylene	1733000	2324	

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Triisopropanol amine	1734000			unsym-Dimethylhydrazine	0159004	1163	57-14-7
Trimethoxysilane	0396000	9269	2487-90-3	Uracil mustard	1763000		
Trimethyl benzene	1738000	2325		Uranium hexafluoride	1765000	2978	
Trimethyl hexamethylene diamine	1739000	2327		Uranium metal (pyrophoric)	1764000	2979	
Trimethyl hexamethylene diisocyanate	1740000	2328		Uranium peroxide	1766000		
Trimethyl phosphite	1741000	2329		Uranyl acetate	1767000	9180	
Trimethyl tin chloride	1742000			Uranyl nitrate	1768000	2981	
Trimethylacetic acid	1735000			Uranyl sulfate	1769000		
Trimethylacetyl chloride	1736000	2438		Urea	1770000		
Trimethylamine (anhydrous)	0397000	1083	75-50-3	Urea hydrogen peroxide	0401004	1511	124-43-6
Trimethylchlorosilane	0398000	1298	75-77-4	Urea peroxide	0401000	1511	124-43-6
Trimethylene	0121001	1027	95-75-7	Urea, ammonium nitrate soln (w/aqua ammonia)	1771000		
Trimethylmethane	0238003	1969	75-28-5	Urethane	1772000		
Trinitrobenzene (dry or wetted with < 30% water)	1743000	0213		USAFST-40	0264004	3079	126-98-7
Trinitrobenzene (wetted with > 30% water)	1744000	1354		VAC	0403004	1301	108-05-4
Trinitrobenzoic acid (dry or wetted with <30% water)	1746000	1355		Valeraldehyde	1773000	2058	
Trinitrobenzoic acid (wetted with >30% water)	1745000	0215		Valeric acid	1774000	1760	
Trinitroglycerin	0306004	0143	55-63-0	VAM	0403005	1301	108-05-4
Trinitrophenol	0336005		88-89-1	Vanadium	1775000	3285	
Trinitrotoluene (dry or wetted with <30% water)	1747000	0209		Vanadium oxychloride	0402001	2243	7727-18-6
Trinitrotoluene (wetted with >30% water)	1748000	1356		Vanadium oxytrichloride	0402000	2243	7727-18-6
Tri-p-cresyl phosphate	1716000	2574		Vanadium pentoxide	1776000	2862	
Triphenyl tin chloride	1749000			Vanadium trichloride oxide	0402002	2243	7727-18-6
Tripropylene glycol	1750000			Vanadyl sulfate	1777000	2931	
Tripropylene glycol methyl ether	1751000			Vanadyl trichloride	0402003	2243	7727-18-6
Tris-(2,3-dibromopropyl) phosphate	1753000			Vapotone	0377007		107-49-3
Tris-(2-chloroethyl)amine	0399000		555-77-1	VC	0405004	1086	75-01-4
Tris-(aziridinyl)phosphine oxide	1752000	2501		VCM	0405005	1086	75-01-4
Trithene	0394005	1082	79-38-9	VDC	0408003	1303	75-35-4
Trithion	1754000			Vidden D	0135008	2047	542-75-6
Trixylenyl phosphate	1755000			Vinyl A monomer	0403006	1301	108-05-4
Trona	0048003	2692	10294-33-4	Vinyl acetate	0403000	1301	108-05-4
Trypan blue	1756000			Vinyl acetylene	1778000		
TS160	0399002		555-77-1	Vinyl allyl ether	1779000		
Turpentine	0400000	1299	8006-64-2	Vinyl amide	0011003	2074	79-06-1
Turpentine oil	0400003	1299	8006-64-2	Vinyl benzene	0362007	2055	100-42-5
Turpentine spirits	0400004	1299	8006-64-2	Vinyl bromide	0404000	1085	593-60-2
UDMH	0159003	1163	57-14-7	Vinyl carbinol	0017008	1098	107-18-6
Undecane	1758000	2330		Vinyl chloride	0405000	1086	75-01-4
Undecanoic acid	1759000			Vinyl chloride monomer	0405006	1086	75-01-4
Undecanol	1760000			Vinyl cyanide	0013005	1093	107-13-1
Unifume	0192006	1605	106-93-4	Vinyl ethyl ether	0406000	1302	109-92-2
				Vinyl fluoride	0407000	1860	75-02-5
				Vinyl formic acid	0012008	2218	79-10-7

<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>	<u>Chemical Name</u>	<u>ID #</u>	<u>UN #</u>	<u>CAS#</u>
Vinyl isobutyl ether	1780000	1304		Zinc bromide	1792000	9156	
Vinyl methyl ether	0409000	1087	107-25-5	Zinc carbonate	1793000	9157	
Vinyl methyl ketone	0297004	1251	78-94-4	Zinc chloride	1794000	2331	
Vinyl neodecanoate	1781000			Zinc chromate	1795000		
Vinyl toluene	0410000	2618	25013-15-4	Zinc dialkyldithiophosphate	1797000		
Vinyl trichlorosilane	0411000	1305	75-94-5	Zinc dithionite	1798000	1931	
Vinylethylene	0059007	1010	106-99-0	Zinc fluoride	1799000	9158	
Vinylidene chloride	0408000	1303	75-35-4	Zinc fluoroborate	1800000		
Vinylsilicon trichloride	0411004	1305	75-94-5	Zinc fluorosilicate	1801000	2855	
Vorlex	0288005	2477	556-61-6	Zinc formate	1802000	9159	
Vulnoc AB	0025001	9080	1863-63-4	Zinc methyl	0164002	1370	544-97-8
Weedone	0122003	2765	94-75-7	Zinc nitrate	1803000	1514	
White caustic	0359007		1310-73-2	Zinc oxide	1804000		
White phosphorus	0331004		7723-14-0	Zinc phenolsulfonate	1805000	9160	
Wood alcohol	0260005	1230	67-56-1	Zinc phosphide	0413000	1714	
Wood ether	0157003	1033	115-10-6	Zinc potassium chromate	1806000		
Woodtreat	0318003	3155	87-86-5	Zinc sulfate	1807000	9161	
Xenon	1782000	2036		Zinc cyanide	1796000	1713	
Xylene	0412000	1307		Zineb	1808000		
Xylenol	1783000	2261		Ziram	1809000		
Xylol	0412011	1307		Zirconium	1810000	2008	
Yellow phosphorus	0331005		7723-14-0	Zirconium acetate	1811000		
Zectran	1785000			Zirconium nitrate	1812000	2728	
Zinc	1786000	1436		Zirconium oxychloride	1813000		
Zinc acetate	1787000	9153		Zirconium potassium fluoride	1814000	9162	
Zinc ammonium chloride	1788000	9154		Zirconium sulfate	1815000	9163	
Zinc arsenate	1789000	1712		Zirconium tetrachloride	1816000	2503	
Zinc bichromate	1790000			ZP	0413004	1714	
Zinc borate	1791000			Zylylene dichloride	1817000		

DOT Hazard Classification - Section B

10	Class 1 – Explosives, other (conversion only)
11	Division 1.1 Explosives with mass explosion hazard
12	Division 1.2 Explosives with projectile hazard
13	Division 1.3 Explosives w/ predominant fire hazard
14	Division 1.4 Explosives with no significant blast
15	Division 1.5 Very insensitive explosives; blasting
16	Division 1.6 Extremely insensitive detonating arti
20	Class 2 – Gases, other (conversion only)
21	Division 2.1 Flammable gases
22	Division 2.2 Non-flammable
23	Division 2.3 Gases toxic by inhalation
24	Division 2.4 Corrosive gases (Canada)
30	Class 3 - Flammable/Combustible Liquids
40	Class 4 - Flammable Solids, other (conversion only)
41	Division 4.1 Flammable solids
42	Division 4.2 Spontaneously combustible materials
43	Division 4.3 Dangerous when wet materials
50	Class 5 - Oxidizers and Organic peroxides, other (conversion only)
51	Division 5.1 Oxidizers
52	Division 5.2 Organic peroxides
60	Class 6 - Toxic, Infectious material or sub., other (conversion only)
61	Division 6.1 Toxic materials
62	Division 6.2 Infectious substances
70	Class 7 - Radioactive materials
80	Corrosive materials
90	Class 9 - Miscellaneous dangerous goods, other (conversion only)
91	Division 9.1 Miscellaneous dangerous goods- Canada
92	Division 9.2 Environmentally hazardous substances
93	Division 9.3 Dangerous wastes (Canada)
UU	Undetermined

Container Type - Section C1

00	Container type, other
1	<i>Portable Container</i>
10	Portable container, other
11	Drum
12	Cylinder
13	Can or bottle
14	Carboy
15	Box or carton

16	Bag or sack
17	Cask
18	Hose
2	<i>Fixed Container</i>
20	Fixed container, other
21	Tank or silo
22	Pipe or Pipeline
23	Bin
24	Machinery or process equipment
28	Hose
3	<i>Natural Containment</i>
30	Natural container, other
31	Sump or pit
32	Pond or surface impoundment
33	Well
34	Dump site or landfill
4	<i>Mobile Container</i>
40	Mobile container, other
41	Vehicle fuel tank and associated piping
42	Product tank on or towed by vehicle
43	Piping associated with mobile product tank loading or off loading
48	Hose
91	Rigid Intermediate Bulk Container (RIBC)
NN	None
UU	Undetermined

Units Capacity - Section C3

1	<i>Volume units</i>
11	Ounces (liquid)
12	Gallons
13	Barrels (42 gal)
14	Liters
15	Cubic feet
16	Cubic meters
2	<i>Weight units</i>
21	Ounces (weight).
22	Pounds
23	Grams
24	Kilograms

Units Released - Section D2**Please Note:**

The code set table used for this data element is the same set that is used for “Units: Capacity” – section C3 in the Hazmat Module. Please refer to page 235 for the codes listed for that data element.

Physical State When Released - Section E1

- 1 Solid
- 2 Liquid
- 3 Gas
- U Undetermined

Released Into - Section E2

- 1 Air
- 2 Water
- 3 Ground
- 4 Water and ground
- 5 Air and ground
- 6 Water and air
- 7 Air, water, and ground
- 8 Confined, no environmental impact
- U Undetermined (conversion only)

Released From - Section F1

- 1 Inside or on structure
- 2 Outside of structure

Population Density - Section F2

- 1 Urban Center - Densely populated
- 2 Suburban - Predominantly single family residential
- 3 Rural - Scattered small communities and farms

Area Affected - Section G1

- 1 Square Feet
- 2 Blocks
- 3 Square Miles

Area Evacuated - Section G2**Please Note:**

The code set table used for this data element is the same set that is used for “Area Affected” – section G1 in the HazMat Module. Please see the codes listed above.

HazMat Actions Taken - Section H***1 Hazardous Condition***

- 11 Identify, analyze hazardous materials
- 12 Hazmat detection, monitoring, sampling, & analysis
- 13 Hazmat spill control and confinement
- 14 Hazmat leak control and containment
- 15 Remove hazard or hazardous materials
- 16 Decontaminate persons or equipment

2 Isolation and Evacuation

- 21 Determine materials to be non-hazardous
- 22 Isolate area & establish hazard control zones
- 23 Provide apparatus
- 24 Provide equipment
- 25 Provide water
- 26 Control crowd
- 27 Control traffic
- 28 Protect-in-place operations

3 Information, Investigation & Enforcement

- 31 Refer to proper authority
- 32 Notify other agencies
- 33 Provide information to public or media
- 34 Investigate
- 35 Standby
- 00 Action taken, other

Release/Ignition Sequence - Section I

- 1 Ignition
- 2 Release
- U Undetermined

Cause of Release - Section J

- 1 Intentional
- 2 Unintentional release
- 3 Container or containment failure
- 4 Act of nature
- 5 Cause under investigation
- U Cause undetermined after investigation

Factors Contributing to Release - Section K***3 Failure to Control Hazardous Material***

- 31 Abandoned or discarded hazardous material
- 32 Failure to maintain proper temperature
- 33 Fell asleep and lost control of operations

Factors Contributing to Release - Section K (continued)

34	Inadequate control of hazardous materials
37	Person possibly impaired by drugs or alcohol
38	Person otherwise impaired or unconscious
30	Failure to control hazardous materials, other
4	<i>Misuse of Hazardous Materials</i>
42	Improper mixing technique
43	Hazardous materials used improperly
45	Improper container
46	Improper movement of hazardous materials container
47	Improper storage procedures
48	Children playing with hazardous materials
40	Misuse of hazardous materials, other
5	<i>Mechanical Failure, Malfunction</i>
51	Automatic control failure
52	Manual control failure
53	Short circuit, ground fault
54	Other part failure, leak, or break
55	Other electrical failure
56	Lack of maintenance, worn out
50	Mechanical failure, malfunction, other
6	<i>Design, Construction, Installation Deficiency</i>
61	Design deficiency
62	Construction deficiency
64	Installation deficiency
60	Design/construction/installation deficiency, other
7	<i>Operational Deficiency</i>
71	Collision, overturn, knockdown
72	Accidentally turned on, not turned off
73	Equipment unattended
74	Equipment overload
75	Failure to clean equipment
76	Improper startup, shutdown procedures
77	Equipment used for purpose not intended
78	Equipment not being operated properly
70	Operational deficiency, other
8	<i>Natural Condition</i>
81	High wind
82	Earthquake
83	High water, flood
84	Lightning
85	Low humidity
86	High humidity

87	Low temperature
88	High temperature
80	Natural condition, other
9	<i>Special Release Factors</i>
91	Animal
92	Secondary release following previous release
93	Reaction with other chemical
97	Failure to use ordinary care
00	Other factor contributed to release
UU	Undetermined

Factors Affecting Mitigation - Section L

1	<i>Site Factors</i>
11	Released into water table
12	Released into sewer system
13	Released into wildland/wetland area
14	Released in residential area
15	Released in occupied building
16	Air release in confined area
17	Released, slick on waterway
18	Released on major roadway
10	Site factor, other
2	<i>Release Factors</i>
21	Release of extremely dangerous agent
22	Threatened release of extremely dangerous agent
23	Combination of release and fire impeded mitigation
24	Multiple chemicals released, unknown effects
25	Release of unidentified chemicals, unknown effects
20	Release factor, other
3	<i>Impediment or Delay</i>
31	Access to release area
32	Hazmat apparatus unavailable
33	Hazmat apparatus failure
34	Traffic delay
35	Trouble finding location
36	Communications delay
37	Hazmat - trained crew unavailable or delayed
30	Impediment or delay, other
4	<i>Natural Conditions</i>
41	High wind
42	Storm
43	High water, including floods
44	Earthquake

Factors Affecting Mitigation - Section L (continued)

45	Extreme high temperature
46	Extreme low temperature
47	Ice or snow conditions
48	Lightning
49	Animal
40	Natural condition, other
00	Other factor affected mitigation
NN	None

Equipment Involved in Release - Section M**Please Note:**

The code set table used for this data element is the same set that is used for “Equipment Involved In Ignition”- section F1 in the Fire Module. Please refer to page 176 for the codes listed for that data element.

Mobile Property Type - Section N**Please Note:**

The code set table used for this data element is the same set that is used for “Mobile Property Type” – section H2 in the Fire Mod-

ule. Please refer to page 181 for the codes listed for that data element.

Mobile Property Make - Section N**Please Note:**

The code set table used for this data element is the same set that is used for “Mobile Property Make” – section H2 in the Fire Module. Please refer to page 182 for the codes listed for that data element.

HazMat Disposition - Section O

1	Completed by fire service only
2	Completed with fire service present
3	Released to local agency
4	Released to county agency
5	Released to state agency
6	Released to federal agency
7	Released to private agency
8	Released to property owner or manager

Wildland Module Data Dictionary**Subsection**

NENE	Northeast by Northeast
NENW	Northeast by Northwest
NESE	Northeast by Southeast
NESW	Northeast by Southwest
NWNW	Northwest by Northwest
NWNE	Northwest by Northeast
NWSE	Northwest by Southeast
NWSW	Northwest by Southwest
SESE	Southeast by Southeast
SESW	Southeast by Southwest
SENE	Southeast by Northeast
SENW	Southeast by Northwest
SWSW	Southwest by Southwest
SWSE	Southwest by Southeast
SWNE	Southwest by Northeast
SWNW	Southwest by Northwest

Meridian - Section B

01	First Principal
02	Second Principal
03	Third Principal
04	Fourth Principal
05	Fifth Principal
06	Sixth Principal
07	Black Hills
08	Boise
09	Chickasaw
10	Choctaw
11	Cimarron
12	Copper River
13	Fairbanks
14	Gila and Salt River
15	Humboldt
16	Huntsville
17	Indian
18	Louisiana
19	Michigan
20	Principal
21	Mt. Diablo
22	Navajo

23	New Mexico
24	St. Helena
25	St. Stephens
26	Salt Lake
27	San Bernardino
28	Seward
29	Tallahassee
30	Uintah
31	Ute
32	Washington
33	Willamette
34	Wind River
35	Ohio
36	Great Miami River
37	Muskingum River
38	Ohio River
39	First Scioto River
40	Second Scioto River
41	Third Scioto River
42	Ellicotts Line
43	12 Mile Square
44	Kateel River
45	Umiat
UU	Undetermined

Area Type - Section C

1	Rural, including farms >50 acres
2	Urban, heavily populated areas
3	Rural/urban or suburban
4	Urban/wildland interface area

Wildland Fire Cause - Section D1

1	Natural source
2	Equipment
3	Smoking
4	Open/outdoor fire
5	Debris, vegetation burn
6	Structure (exposure)
7	Incendiary
8	Misuse of fire
0	Other cause
U	Undetermined

Human Factors Contributing to Ignition - Section D2**Please Note:**

The code set table used for this data element is the same set that is used for "Human Factors Contributing to Ignition" - section E3 in the Fire Module. Please refer to page 176 for the codes listed for that data element.

Factors Contributing to Ignition - Section D3**Please Note:**

The code set table used for this data element is the same set that is used for "Factors Contributing to Ignition" - section E2 in the Fire Module. Please refer to page 175 for the codes listed for that data element.

Fire Suppression Factors - Section D4**Please Note:**

The code set table used for this data element is the same set that is used for "Fire Suppression Factors" - section G in the Fire Module. Please refer to page 180 for the codes listed for that data element.

Heat Source - Section E**Please Note:**

The code set table used for this data element is the same set that is used for "Heat Source" - section D2 in the Fire Module. Please refer to page 172 for the codes listed for that data element.

Mobile Property Type - Section F**Please Note:**

The code set table used for this data element is the same set that is used for "Mobile Property Type" - section H2 in the Fire Module. Please refer to page 181 for the codes listed for that data element.

Equipment Involved in Ignition - Section G**Please Note:**

The code set table used for this data element is the same set that is used for "Equipment Involved in Ignition" - section F1 in the Fire Module. Please refer to page 176 for the codes listed for that data element.

Weather Type - Section H

- 10 Clear, less than 1/10 cloud cover
- 11 Scattered clouds, 1/10 to 5/10 cloud cover
- 12 Broken clouds, 6/10 to 9/10 cloud cover
- 13 Overcast, over 9/10 cloud cover
- 14 Foggy
- 15 Drizzle or mist

- 16 Rain
- 17 Snow or sleet
- 18 Shower
- 19 Thunderstorm in progress
- 00 Other weather type

Wind Direction - Section H

- 1 North
- 2 Northeast
- 3 East
- 4 Southeast
- 5 South
- 6 Southwest
- 7 West
- 8 Northwest
- 9 Shifting winds
- N None/Calm
- U Undetermined

Fire Danger Rating - Section H

- 1 Low fire danger
- 2 Moderate fire danger
- 3 High fire danger
- 4 Very high fire danger
- 5 Extreme fire danger
- U Undetermined

Property Management - Section J***Private***

- 1 Tax paying
- 2 Non-tax paying

Public

- 3 City, town, village or other locality
- 4 County or parish
- 5 State or province
- 6 Federal
- 7 Foreign
- 8 Military
- 0 Other
- U Undetermined

NFDRS Fuel Model at Origin - Section K

01	A: Annual Grasses.
02	B: Mature brush [6 ft.+]
03	C: Open pine with grass
04	D: Southern rough
05	E: Hardwood litter
06	F: Intermountain west brush
07	G: West Coast conifers; close, heavy down materials
08	H: Short needle conifers; normal down woody materials
09	I: Heavy slash, clear-cut conifers greater than 25 tons per area
10	J: Medium slash, heavily thinned conifers (less than 25 tons per acre)
11	K: Light slash (less than 15 tons per acre)
12	L: Perennial grasses
14	N: Saw grass, marsh needle-like grass
15	O: High pocosin
16	P: Southern long-needle pine
17	Q: Alaska black spruce
18	R: Hardwood litter (summer)
19	S: Tundra
20	T: Sagebrush with grass
21	U: Western long-leaf pine
UU	Undetermined

Person Responsible for Fire - Section L1

1	Identified person caused fire
2	Unknown person caused fire
3	Fire not caused by person

Gender - Wildland Module, Section L2**Please Note:**

The code set table used for this data element is the same set that is used for "Gender" - section B in the Civilian Fire Casualty Module. Please refer to page 186 for the codes listed for that data element.

Activity of Person - Section L4

01	Logging/timber harvest
02	Management activities
03	Construction/maintenance
04	Social gathering
05	Hunting
06	Fishing

07	Other recreation
08	Camping
09	Other permitted harvest
10	Picnicking
11	Non-permitted harvest
12	Harvest of Illegal material
13	Religious or ceremonial activity
14	Oil/gas production
15	Military operations
16	Subsistence
17	Mining
18	Livestock grazing
19	Target practice
20	Blasting
21	Fireworks use
00	Human activity, other

Type of Right of Way - Section M

919	Dump, sanitary landfill
921	Bridge, trestle
922	Tunnel
926	Outbuilding, excluding garage
931	Open land, field
935	Campsite with utilities
936	Vacant lot
938	Graded and cared for plots of land
940	Water area
951	Railroad right-of-way
952	Railroad yard
960	Street, other
961	Highway or divided highway
962	Residential street, road or residential driveway
963	Street or road in commercial area
965	Vehicle parking area
972	Aircraft runway
973	Aircraft taxiway
974	Aircraft loading area
981	Construction site
982	Oil, gas field
983	Pipeline, power line or other utility right-a-way
984	Industrial plant yard, area
000	Type of right away, other

Type of Right of Way - Section M (continued)

UUU Undetermined

NNN None

Relative Position on Slope - Section N

0 Valley Bottom

1 Lower Slope

2 Mid Slope

3 Upper Slope

4 Ridge Top

Aspect - Section N

0 Flat/None

1 Northeast

2 East

3 Southeast

4 South

5 Southwest

6 West

7 Northwest

8 North

Apparatus or Resource Module Data Dictionary**Apparatus or Resources - Section B*****1 Ground Fire Suppression***

- 10 Ground fire suppression, other
- 11 Engine
- 12 Truck or aerial
- 13 Quint
- 14 Tanker & pumper combination
- 16 Brush truck
- 17 ARF (aircraft rescue & firefighting)

2 Heavy Ground Equipment

- 20 Heavy ground equipment, other
- 21 Dozer or plow
- 22 Tractor
- 24 Tanker or tender

4 Aircraft

- 40 Aircraft, other
- 41 Aircraft, fixed wing tanker
- 42 Helitanker
- 43 Helicopter

5 Marine Equipment

- 50 Marine equipment, other
- 51 Fire boat with pump
- 52 Boat, no pump

6 Support Equipment

- 60 Support apparatus, other
- 61 Breathing apparatus support
- 62 Light and air unit

7 Medical & Rescue Unit

- 70 Medical & rescue unit, other
- 71 Rescue unit
- 72 Urban search & rescue unit
- 73 High angle rescue
- 75 BLS unit
- 76 ALS unit

9 Other

- 91 Mobile command post
- 92 Chief officer car
- 93 HazMat unit
- 94 Type I hand crew
- 95 Type II hand crew
- 99 Privately owned vehicle
- 00 Other apparatus/resource
- NN None
- UU Undetermined

Apparatus Use - Section B

- 1 Suppression
- 2 EMS
- 0 Other

Personnel Module Data Dictionary

Actions Taken - Section B

Please Note:

The code set table used for this data element is the same set that is used for “Actions Taken” - section F in the Basic Module. Please refer to page 165 for the codes listed for that data element.

Apparatus or Resource Type - Section B

Please Note:

The code set table used for this data element is the same set that is used for “Apparatus or Resource Type” - section B in the Apparatus/Resources Module. Please refer to page 243 for the codes listed for that data element.

Arson Module Data Dictionary**Case Status - Section C**

- 1 Investigation open
- 2 Investigation closed
- 3 Investigation inactive
- 4 Investigation closed with arrest
- 5 Closed with exceptional clearance

Availability of Material First Ignited - Section D

- 1 Transported to scene
- 2 Available at scene
- U Unknown

Suspected Motivation Factors - Section E

- 11 Extortion
- 12 Labor unrest
- 13 Insurance fraud
- 14 Intimidation
- 15 Void contract/lease
- 21 Personal
- 22 Hate crime
- 23 Institutional
- 24 Societal
- 31 Protest
- 32 Civil unrest
- 41 Fireplay/curiosity
- 42 Vanity/recognition
- 43 Thrills
- 44 Attention/sympathy
- 45 Sexual excitement
- 51 Homicide
- 52 Suicide
- 53 Domestic violence
- 54 Burglary
- 61 Homicide concealment
- 62 Burglary concealment
- 63 Auto theft concealment
- 64 Destroy records/evidence
- 00 Other suspected motivation
- UU Unknown

Apparent Group Involvement - Section F

- 1 Terrorist group
- 2 Gang
- 3 Anti-government group
- 4 Outlaw motorcycle organization
- 5 Organized crime
- 6 Racial/ethnic hate group
- 7 Religious hate group
- 8 Sexual preference hate group
- 0 Other group
- N No group involvement, acted alone
- U Unknown

Entry Method - Section G1

- 11 Door – open or unlocked
- 12 Door – forced or broken
- 13 Window – open or unlocked
- 14 Window – forced or broken
- 15 Gate – open or unlocked
- 16 Gate – forced or broken
- 17 Locks – pried
- 18 Locks – cut
- 19 Floor entry
- 21 Vent
- 22 Attic/roof
- 23 Key
- 24 Help from inside
- 25 Wall
- 26 Crawl space
- 27 Hid in/on premises
- 00 Other entry method
- UU Unknown

Extent of Fire Involvement on Arrival at Scene - Section G2

- 1 No flame or smoke showing
- 2 Smoke only showing
- 3 Flame and smoke showing
- 4 Fire through roof
- 5 Fully involved

Incendiary Devices - Container - Section H

11	Bottle, glass
12	Bottle, plastic
13	Jug
14	Pressurized container
15	Can (not gasoline or fuel can)
16	Gasoline or fuel can
17	Box
00	Other container
NN	No Container
UU	Unknown

Incendiary Devices - Ignition/Delay Device Type - Section H

11	Wick or fuse
12	Candle
13	Cigarette and matchbook
14	Electronic component
15	Mechanical device
16	Remote control
17	Road flare/fuse
18	Chemical component
19	Trailer/Streamer
20	Open flame source
00	Other Delay Device
NN	No device
UU	Unknown

Incendiary Devices - Fuel Type - Section H

11	Ordinary combustibles
12	Flammable gas
14	Ignitable liquid
15	Ignitable solid
16	Pyrotechnic material
17	Explosive material
00	Other material
NN	None
UU	Unknown

Other Investigative Information - Section I

1	Code violations
2	Structure for sale
3	Structure vacant
4	Other crimes involved

5	Illicit drug activity
6	Change in insurance
7	Financial problems
8	Criminal/Civil actions pending

Property Ownership - Section J

1	Private
2	City, town, village, local
3	County or parish
4	State or province
5	Federal
6	Foreign
7	Military
0	Other

Initial Observations - Section K

1	Windows ajar
2	Doors ajar
3	Doors locked
4	Doors unlocked
5	Fire department forced entry
6	Entry forced prior to FD arrival
7	Security system was activated
8	Security system was present but not activated

Laboratory Used - Section L

1	Local
2	State
3	ATF
4	FBI
5	Other Federal
6	Private
N	None

Gender - Section M3

1	Male
2	Female

Race - Section M4

1	White
2	Black
3	American Indian, Eskimo or Aleut
4	Asian

Race - Section M4 (continued)

- 0 Other, includes multi-racial
- U Undetermined

Ethnicity - Section M5

- 1 Hispanic
- 0 Other

Family Type - Section M6

- 1 Single parent family
- 2 Foster parent(s)
- 3 Two parent family
- 4 Extended family, including multigenerational
- N No family unit
- 0 Other family type
- U Unknown

Motivation/Risk Factors - Section M7

- 1 Mild curiosity about fire
- 2 Moderate curiosity about fire

- 3 Extreme curiosity about fire
- 4 Diagnosed (or suspected) ADD/ADHD
- 5 History of trouble outside school
- 6 History of stealing or shoplifting
- 7 History of physically assaulting others
- 8 History of fireplay or firesetting
- 9 Transiency
- 0 Other
- U Unknown

Disposition of Person Under 18 - Section M8

- 1 Handled within department
- 2 Released to parent or guardian
- 3 Referred to other authority
- 4 Referred to treatment/counseling program
- 5 Arrested, charged as adult
- 6 Referred to firesetter intervention program
- 0 Other
- U Unknown

Conversion Tables for NFIRS 4.1 to 5.0

This section is provided to assist in the transition from NFIRS 4.1 to NFIRS 5.0. Users of data that has been converted are cautioned to review both the old data description and the new data description(s) as there may be some slight variations and some assumptions had to be made.

General guidelines

All insufficient information “0” have been changed to the appropriate “other” classification.

Any reference to classifications in another data element are to the NFIRS 4.1 classifications if in the NFIRS 4.1 column and to the NFIRS 5.0 if in the 5.0 column

Abbreviations used in conversion tables are as follows:

MPT = Mobile Property Type
FPU = Fixed Property Use
AFO = Area of Origin
EII = Equipment Involved in Ignition
TMI = Type of Material Ignited
SS = Structure Status

NFIRS 4.1 Carryover Elements

Note that the following elements will be carried in the NFIRS 5.0 system as part of the converted 4.1 records. These elements are not collected in NFIRS 5.0 and are carried in the converted 4.1 records for legacy purposes only:

Method of Alarm from Public
Method of Extinguishment
Construction Type
Extent of Smoke Damage
Type of Material Generating Most Smoke
Form of Material Generating Most Smoke
Avenue of Smoke Travel

Basic, Fire, and Structure Modules

TABLE 3-40. Type of Situation Found Conversion (Sheet 1 of 2)

NFIRS 4.1 Type of Situation Found	NFIRS 5.0 Incident Type
<i>Titled as "Incident Type" in NFIRS 5.0</i>	
10	100
11 and MPT = blank, 00 or 08	110
11 and MPT not blank, 00 or 08	120
11 and MPT = 17 and FPU = 410-419	121 and Structure Fire Module Block II Structure Type = 2
11 and MPT = 17 and FPU not 410-419	123
12 and FPU = 655 or FPU = 660-669	170
12 and Complex = 41 or 42	171
12 and (Complex not 41 or 42) and (FPU not 655 or not 660-669 series)	172
13	130
14	140
15	150
16 and AFO 91 - 95	163
16 and AFO = 80 - 89	130
16 and MPT = 17	120
16 and not one of above conditions	110
17	160
19	100
20	200
21	210
22	220
29	200
30	300
31	321
32	320
33	331
34	340
35	350
39	300
40	400
41	410
42	471
43	251
44	444
45	440
46	462
47	420

TABLE 3-40. Type of Situation Found Conversion (Sheet 2 of 2)

NFIRS 4.1 Type of Situation Found	NFIRS 5.0 Incident Type
<i>Titled as "Incident Type" in NFIRS 5.0</i>	
49	400
50	500
51	511
52	521
53	531
54	542
55	551
56	561
57	571
59	500
60	600
61	651
62	621
63	631
64	641
65	652
69	600
70	700
71	710
72	721
73	730
74	740
79	700
99	900
00	UUU

TABLE 3-41. Type of Action Taken Conversion (Sheet 1 of 2)

NFIRS 4.1 Action Taken	NFIRS 5.0		
	Action 1	Action 2	Action 3
1	11		
2	22	31	
3	86		
4	41		
5	92		
6	12		
7	34		
8	91		

TABLE 3-41. Type of Action Taken Conversion (Sheet 2 of 2)

NFIRS 4.1 Action Taken	NFIRS 5.0		
	Action 1	Action 2	Action 3
9	00		
0	UU		

TABLE 3-42. Mutual Aid Conversion

NFIRS 4.1 Mutual Aid	NFIRS 5.0 Aid Given or Received
1	1
2	3
Blank	N

TABLE 3-43. Fixed Property Use Conversion (Sheet 1 of 4)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0 Property Use
110	110
111	111
112	112
113	113
114	114
115	115
116	116
119	110
120	120
121	121
122	122
123	123
124	124
129	129
130	130
131	131
132	131
133	131
134	134
139	130
140	140
141	141
142	142
143	143
149	140
150	150
151	151

TABLE 3-43. Fixed Property Use Conversion (Sheet 2 of 4)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0 Property Use
152	152
153	150
154	154
155	155
156	150
159	150
160	160
161	161
162	162
163	162
164	161
169	160
170	170
171	171
172	171
173	173
174	174
175	174
176	174
177	170
179	170
180	180
181	181
182	182
183	183
184	183
185	185
186	186
189	180
109	100
100	100
200	200
209	200
210	210
211	211
212	213
213	213
214	215
215	215
219	210

TABLE 3-43. Fixed Property Use Conversion (Sheet 3 of 4)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0 Property Use
220	210
221	210
229	210
230	241
231	241
232	241
233	241
234	241
239	241
241	241
241	241
249	241
300	300
309	300
310	311
311	311
312	459
319	311
320	250
321	250
322	459
323	419
329	250
330	331
331	323
332	331
334	340
339	331
340	361
341	361
342	361
343	363
344	361
345	365
346	241
349	361
350	331
351	331
352	331
359	331

TABLE 3-43. Fixed Property Use Conversion (Sheet 4 of 4)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0 Property Use
360	323
361	323
362	321
369	323

TABLE 3-44. Fixed Property Use Residential Conversion (Sheet 1 of 2)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0	
	Property Use	Number of Units
400	400	
409	400	
410	419	
411	419	1
412	419	1
414	419	2
415	419	2
419	419	
420	429	
421	429	1
422	429	4*
423	429	12*
424	429	21*
429	429	
430	439	
431	439	5**
432	439	10**
439	439	
440	449	
441	449	10***
442	449	10***
443	449	50***
444	449	50***
445	449	101***
446	449	101***
449	449	
460	460	
461	464	
462	462	
463	464	
464	464	
465	464	
466	464	

*3-6 units shown as 4 units
7-20 units shown as 12 units
over 20 units shown as 21 units

**3-8 roomers shown as 5 units
9-15 roomers shown as 10 units

*** less than 20 units shown as 10
20 to 99 units shown as 50 units
100 or more units shown as 101 units

TABLE 3-44. Fixed Property Use Residential Conversion (Sheet 2 of 2)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0	
	Property Use	Number of Units
469	460	
480	449	
481	449	10***
482	449	10***
483	449	50***
484	449	50***
485	449	101***
486	449	101***
489	449	
490	400	
491	400	
492	400	Structure Type = 5
499	400	

*3-6 units shown as 4 units
7-20 units shown as 12 units
over 20 units shown as 21 units

**3-8 roomers shown as 5 units
9-15 roomers shown as 10 units

*** less than 20 units shown as 10
20 to 99 units shown as 50 units
100 or more units shown as 101 units

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 1 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
500	500	N/A			—
509	500	N/A			—
510	519	110	120		Sales
511	519	110	112	114	Sales
512	519	110	112	114	Sales
513	519	111			Sales
514	519	121	122		Sales
515	519	113			Sales
516	519	116			Sales
519	519	110	120		Sales
520	529	210	220		Sales
521	529	221			Sales
522	529	222	230		Sales
523	529	222			Service/repair
524	529	221			Manufacturing
525	529	332			Sales

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 2 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
526	529	214			Sales
529	529	210	220		Sales
530	539	240			Sales
531	539	241			Sales
532	539	711			Sales
533	539	610	620		Sales
534	539	941			Sales
535	539	634	635		Sales
536	539	631	632	633	Sales
537	539	241			Service/repair
538	539	711			Service/repair
539	539	240			Sales
540	549	N/A			—
541	549	411	412	413	Sales
542	549	411	134	972	Sales
543	549	544			Sales
544	549	231			Sales
545	549	245	246		Sales
546	549	331			Sales
547	549	131			Sales
548	549	223			Sales
549	549	N/A			—
550	559	N/A			—
551	559	942			Sales
552	559	944			Sales
553	559	714			Sales
554	559	131	137	138	Sales
555	559	311			Sales
556	559	136	724		Sales
557	557	N/A			—
558	559	934			Sales
559	559	N/A			—
560	569	N/A			—
561	569	720			Sales
562	569	613			Sales
563	569	943			Sales
564	564	543	221		Sales
565	569	212			Sales
566	564	221			Sales

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 3 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
567	569	543			Sales
568	569	952	110		Sales
569	569	N/A			—
570	579	810	820		Sales
571	571	511	514		Sales
572	571	511	514		Sales
573	579	635	813		Service/repair
574	579	811			Sales
575	579	813	814		Sales
576	579	821			Sales
577	571	511	514		Sales
578	579	543			Sales
579	579	810	820		Sales
580	580	950			Sales
581	581	950			Sales
582	580	950			Sales
583	581	950			Sales
584	580	950			Sales
585	580	950			Sales
589	580	950			Sales
590	599	N/A			—
591	599	N/A			—
592	592	N/A			—
593	593	N/A			—
594	593	N/A			—
595	596	N/A			—
596	596	N/A			—
599	599	N/A			—
600	600	N/A			—
609	600	N/A			—
610	600	N/A			—
611	700	550			Manufacturing
612	700	550	932		Manufacturing
613	615	N/A			—
614	614	N/A			—
615	615	N/A			—
616	700	520			Manufacturing
619	610	N/A			—
620	629	N/A			—

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 4 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
621	629	720	540		Service/repair
622	629				
623	629				
624	629	550			Service/repair
625	629	712			Service/repair
626	629	130			
627	629	N/A			—
629	629	N/A			—
If complex 63 and FPU 630	631	N/A			—
If complex not 63 and FPU 630	600	N/A			—
631	631	N/A			—
If complex 63 and FPU 632	631	N/A			—
If complex not 63 and FPU 632	639	N/A			—
633	639	N/A			—
634	639	N/A			—
635	635	N/A			—
636	891	410	713		Storage
639	600	N/A			—
640	640	N/A			—
642	642	N/A			—
644	644	N/A			—
645	645	N/A			—
646	640	N/A			—
647	647	N/A			—
648	648	N/A			—
649	640	N/A			—
650	659	N/A			—
651	659	112			Manufacturing
652	659	135			Manufacturing
653	659	135			Manufacturing
654	659	135			Manufacturing
655	655	139			Manufacturing
656	655	134			Manufacturing
657	655	114			Manufacturing
659	659	N/A			—
660	669	N/A			—

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 5 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
661	669	N/A			—
662	669	N/A			—
663	669	N/A			—
664	669	N/A			—
665	659	112			Manufacturing
666	807	315			Manufacturing
669	669	N/A			—
670	679	N/A			—
671	679	532			Manufacturing
672	679	341			Manufacturing
673	679	341			Manufacturing
674	679	510	520		Manufacturing
675	679	624			Manufacturing
676	679	345			Manufacturing
677	679	138	542		Manufacturing
678	679	300			Manufacturing
679	679	N/A			—
680	700	340			Manufacturing
681	700	622	624		Manufacturing
682	700	245			Manufacturing
683	700	245			Manufacturing
684	700	245			Manufacturing
685	700	622			Manufacturing
686	700	622			Manufacturing
687	700	628			Manufacturing
688	700	340			Manufacturing
689	700	340			Manufacturing
700	700	N/A			—
708	700	610			Service/repair
709	700	N/A			—
710	700	100			Manufacturing
711	700	112			Manufacturing
712	700	113			Manufacturing
713	700	114			Manufacturing
714	700	112			Manufacturing
715	700	117	132		Manufacturing
716	700	111			Manufacturing
717	700	115			Manufacturing
718	700	110			Manufacturing

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 6 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
719	700	100			Manufacturing
720	700	120			Manufacturing
721	700	121			Manufacturing
722	700	121			Manufacturing
723	700	121			Manufacturing
724	700	122			Manufacturing
725	700	134			Manufacturing
726	700	345			Manufacturing
729	700				Manufacturing
730	700	320			Manufacturing
731	700	321			Manufacturing
732	700	321			Manufacturing
733	700	322			Manufacturing
734	700	320			Manufacturing
735	700	214			Manufacturing
736	700	214			Manufacturing
737	700	420			Manufacturing
738	700	632			Manufacturing
739	700	320			Manufacturing
740	700	200			Manufacturing
741	700	222			Manufacturing
742	700	221			Manufacturing
743	700	210			Manufacturing
744	700	331			Manufacturing
745	700	332			Manufacturing
746	700	331			Manufacturing
747	700	342			Manufacturing
749	700	200			Manufacturing
750	700	240	310	410	Manufacturing
751	700	311			Manufacturing
752	700	311			Manufacturing
753	700	311	313		Manufacturing
754	700	241	242		Manufacturing
755	700	314	410		Manufacturing
756	700	314	410		Manufacturing
757	700	411			Manufacturing
758	700	412	413		Manufacturing
759	700	240	310	410	Manufacturing
760	700	500			Manufacturing

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 7 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
761	700	540			Manufacturing
762	700	541			Manufacturing
763	700	343			Manufacturing
764	700	343			Manufacturing
765	700	635	517		Manufacturing
766	700	544	225		Manufacturing
767	700	510	521		Manufacturing
768	700	516	532		Manufacturing
769	700	500			Manufacturing
770	700	640			Manufacturing
771	700	641			Manufacturing
772	700	642			Manufacturing
773	700	640			Manufacturing
774	700	611	612		Manufacturing
775	700	626			Manufacturing
776	700	711	712		Manufacturing
779	700	640			Manufacturing
780	700	800			Manufacturing
781	700	821			Manufacturing
782	700	821			Manufacturing
783	700	840			Manufacturing
784	700	811	812	813	Manufacturing
785	700	851			Manufacturing
786	700	830			Manufacturing
787	700	850	811		Manufacturing
789	700	800			Manufacturing
790	700	N/A			Manufacturing
791	700	721	722	725	Manufacturing
792	700	723	714		Manufacturing
793	700	243			Manufacturing
794	700	231			Manufacturing
795	700	941			Manufacturing
796	700	220	543		Service/repair
797	700	714			Service/repair
798	700	942	944		Manufacturing
799	700	N/A			—
800	800	N/A			—
808	808	N/A			—
809	800	N/A			—

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 8 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
810	819	130			Storage
811	816	132			Storage
812	891	139			Storage
813	891	139			Storage
814	891	134			Storage
815	819	135			Storage
816	816	132			Storage
817	819	135			Storage
818	891	132	137	138	Storage
819	819	130			Storage
820	891	210	220		Storage
821	891	321			Storage
822	891	322			Storage
823	891	323			Storage
824	891	320			Storage
825	891	214			Storage
826	891	221			Storage
827	891	222	331		Storage
828	891	330			Storage
829	891	210	220		Storage
830	891	100			Storage
831	891	110			Storage
832	891	122	110		Storage
833	891	115	117		Storage
834	839	112	113		Storage
835	839	112	113	114	Storage
836	891	115			Storage
837	891	117			Storage
838	891	134			Storage
839	891	100			Storage
840	800	510	520		Storage
841	849	510			Storage
842	849	520			Storage
843	849	522			Storage
844	849	935			Storage
845	891	514	515		Storage
846	891	121			Storage
849	800	510	520		Storage
850	891	310	410		Storage

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 9 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
851	891	662	311		Storage
852	891	241			Storage
853	891	314	420		Storage
854	891	414			Storage
855	891	415	416		Storage
856	807	311	312		Storage
859	891	310	410		Storage
860	891	343	540		Storage
861	891	542			Storage
862	891	541			Storage
863	891	343			Storage
864	891	138			Storage
865	891	635			Storage
866	891	544	225		Storage
867	891	342			Storage
886	891	714			Storage
869	891	343	540		Storage
870	891	640			Storage
871	891	640			Storage
872	891	640			Storage
873	891	621			Storage
874	891	611	612		Storage
875	891	711			Storage
876	891	640			Storage
877	807	961	962		Storage
879	891	640			Storage
880	880	810			Storage
881	881	811			Storage
882	882	811			Storage
883	965	811			Storage
884	965	812			Storage
885	898	821			Storage
886	880	831	832		Storage
887	880	841			Storage
888	888	811			Storage
889	880	810			Storage
890	891	N/A			—
891	891	N/A			—
892	891	622			Storage

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 10 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
893	891	245			Storage
894	891	N/A			—
895	891	531	532	534	Storage
896	891	N/A			—
897	839	N/A			—
898	898	N/A			—
899	891	N/A			—
900	900				
909	900				
910	UUU				
911	UUU and ss = 1				
912	UUU and ss = 7				
913	UUU and ss = 1				
914	UUU and ss = 7				
915	UUU and ss = 6				
916	808				
917	UUU and ss = 3				
918	UUU and ss = 4				
919	UUU				
920	900				
921	921				
922	922				
924	926				
925	926				
926	926				
927	926				
928	170 and MPT = 76				
929	900				
930	900				
931	931				
932	919				
933	900				Incident type = 174
934	938				
935	935				
936	936				
939	900				
940	940				
941	941				

Note: ss= Structure Status

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 11 of 11)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0				
	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
942	941				
943	940				
944	940				
945	940				
946	946				
949	940				
950	952				
951	951				
952	952				
953	951				
954	951				
959	952				
960	960				
961	961				
962	962				
963	962				
964	962				
965	965				
969	960				
970	900				
971	900				
972	972				
973	973				
974	974				
979	900				
980	900				
981	981				
982	982				
983	983				
989	900				
008	UUU				
009	UUU				
000	UUU				

TABLE 3-46. Ignition Factor Conversion (Sheet 1 of 2)

NFIRS 4.1 Ignition Factor	NFIRS 5.0		
	Cause	Factors Contributing to Ignition	Human Factors Contributing to Ignition
11	1		
12	1		
21	1		
22	1		
30	2		
31	2	11	
32	2	12	
33	2		1
34	2	73	
35	2	13	
36	2	19	7 (Age=9)
37	2		2
39	2		
40	2	10	
41	2	14	
42	2	15	
43	2	16	
44	2	17	
45	2	18	
46	2	12	
47	2	18	
48	2	19	7 (Age=9)
49	2	10	
50	3	20	
51	3	23	
52	3	21	
53	3	22	
54	3	34	
55	3	30	
56	3	25	
57	3	26	
59	3	20	
60	3	40	
61	3	41	
62	3	42	
63	3	43	
64	3	43	
65	3	71	

TABLE 3-46. Ignition Factor Conversion (Sheet 2 of 2)

NFIRS 4.1 Ignition Factor	NFIRS 5.0		
	Cause	Factors Contributing to Ignition	Human Factors Contributing to Ignition
69	3	40	
70	2	50	
71	2	51	
72	2	52	
73	2	53	
74	2	54	
75	2	60	
76	2	56	
79	2	50	
80	4	60	
81	4	61	
82	4	64	
83	4	63	
84	4	62	
89	4	60	
91	4	66	
92	2	72	
99	0	00	
00	U	UU	

TABLE 3-47. Complex Conversion (Sheet 1 of 2)

Complex	
NFIRS 4.1	NFIRS 5.0
11	10
12	10
14	10
20	10
33	33
34	No Conversion
40	58
41	40
42	40
44	40
47	40
58	51 or 53
59	59
61	No Conversion
63	63

TABLE 3-47. Complex Conversion (Sheet 2 of 2)

Complex	
NFIRS 4.1	NFIRS 5.0
65	65
66	No Conversion
70	60
80	No Conversion
91	No Conversion
93	No Conversion
94	No Conversion
95	No Conversion
96	No Conversion
97	No Conversion
98	No Conversion

TABLE 3-48. Mobile Property Type Conversion

Mobile Property Type	
NFIRS 4.1	NFIRS 5.0
<i>All Classifications convert directly except as noted below</i>	
00	UU
08	blank
13	18
19	10
29	20
39	30
49	49 but may include some boats that are not sailboats
58	57
59	50
67	74
68	75
69	60
79	00
99	90

Note: This same table can be used for converting Hazardous materials transportation type. 73, 74, and 75 are valid classifications in the hazmat table and will directly convert to the same number.

TABLE 3-49. Area of Origin Conversion

Area of Origin	
NFIRS 4.1	NFIRS 5.0
<i>All Classifications convert directly except as noted below</i>	
19	10
39	30
49	40
59	50
69	60
79	70
89	80
98	blank
99	00
00	UU

TABLE 3-50. Equipment Involved in Ignition Conversion (Sheet 1 of 3)

NFIRS 4.1	NFIRS 5.0		
Equipment Involved in Ignition	Equipment Involved in Ignition	Portable/Stationary	Power Source
00	UUU		
10	100		
11	132	S	
12	151	S	
13	131	S	
14	120	S	
15	141	P	
16	120	S	
17	125	S	
18	152	S	
19	100		
20	600		
21	646	S	
22	645	S	
23	647	S	
24	642	S	
25	632	P	
26	643	P	
27	654	S	
29	600		
30	100		

TABLE 3-50. Equipment Involved in Ignition Conversion (Sheet 2 of 3)

NFIRS 4.1	NFIRS 5.0		
Equipment Involved in Ignition	Equipment Involved in Ignition	Portable/Stationary	Power Source
31	111	S	
32	656	S	
33	117	S	
34	111	S	
35	100	P	
39	100		
40	200		
41	210	S	
42	221	S	
43	213	S	
44	214	S	
45	210	S	
46	230	S	
47	260	P	
48	230	P	
49	200		
50	UUU		
51	700	P	
52	811	S	
53	814	S	
54	830	P	
55	374	S	
56	300	P	
57	850	P	
58	if area of origin = 24 then 600 else 800	P	
59	UUU		
60	UUU		
61	UUU		
62	443	S	
63	720	P	
64	410	S	
65	340	S	
66	375	S	
67	361	S	
68	376	S	
69	UUU		
70	300		
71	353	S	

TABLE 3-50. Equipment Involved in Ignition Conversion (Sheet 3 of 3)

NFIRS 4.1	NFIRS 5.0		
Equipment Involved in Ignition	Equipment Involved in Ignition	Portable/Stationary	Power Source
72	355	S	
73	351	S	
74	300	S	
75	325	S	
76	320	S	
77	300	S	
78	359	S	
79	300		
80	UUU		
81	352	S	
82	365	S	
83	228	P	
84	354	S	
85	230	P	
86	433	S	
87	333	P	
89	UUU		
90	000		
96	Blank		T for the box “mobile property involved and did not burn itself”
98	NNN		
99	000		
00	UUU		

TABLE 3-51. Form of Heat of Ignition Conversion (Sheet 1 of 3)

NFIRS 4.1	NFIRS 5.0		
Form of Heat	Heat Source	Power Source	Factor Contributing to Ignition
<i>Titled as “Heat Source” in NFIRS 5.0</i>			
10	10	UU	
11	11	20	
12	12	20	
13	11	30	
14	12	30	
15	11	40	
16	12	40	
17	11	UU	
18	12	UU	

TABLE 3-51. Form of Heat of Ignition Conversion (Sheet 2 of 3)

NFIRS 4.1	NFIRS 5.0		
Form of Heat	Heat Source	Power Source	Factor Contributing to Ignition
<i>Titled as "Heat Source" in NFIRS 5.0</i>			
19	10	UU	
20	10	10	UU
21	13	10	31
22	13	10	32
23	13	10	33
24	13	10	34
25	13	10	35
26	13	10	36
27	12	10	54
28	12	10	37
29	10	10	UU
30	63		
31	61		
32	62		
33	62		
39	63		
40	60		
41	11 EII s/b 332		
42	11 EII s/b 331		
43	11 EII s/b 333		
44	66		
45	64		
46	65		
47	80		
48	68		
49	60		
50	40		
51	41		
52	42		
53	43		
54	12	10	
55	40		72
56	12	10	
57	12	10	
59	40		
60	50		
61	51		
62	53		

TABLE 3-51. Form of Heat of Ignition Conversion (Sheet 3 of 3)

NFIRS 4.1	NFIRS 5.0		
Form of Heat	Heat Source	Power Source	Factor Contributing to Ignition
<i>Titled as "Heat Source" in NFIRS 5.0</i>			
63	54		
64	54		
65	55		
66	56		
69	50		
70	70		
71	71		
72	72		
73	73		
74	74		
79	70		
80	80		
81	81		
82	82		
83	83		
84	84		
89	80		
97	97		
99	00		
00	UU		

TABLE 3-52. Type of Material Ignited Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
12	12 Not an exact fit but close
13	10
14	12
15	13
16	14
17	10
19	10
29	20
39	30
40	41
41	41
42	41
43	41

TABLE 3-52. Type of Material Ignited Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
44	41
45	41
46	41
49	41
59	50
61	Item First Ignited = 73 *
62	Item First Ignited = 73 *
64	61
65	64 but includes hardboard which is classified in 65
66	65
69	60
71	71
72	71
73	71
83	67
84	71
85	71 + Item First Ignited = 97*
89	80
97	99
98	Blank
99	00
00	UU

* Need to be cautious that we do not overwrite this with a conversion from Form of Material that is inconsistent

TABLE 3-53. Form of Material Ignited Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
<i>Titled as "Item First Ignited" in NFIRS 5.0</i>	
19	10
29	20
39	30
43	91
44	92
49	40
52	51
58	26
59	50
60	00

TABLE 3-53. Form of Material Ignited Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
<i>Titled as "Item First Ignited" in NFIRS 5.0</i>	
61	81
62	82
63	83
64	84
65 if TMI in 20 series	63
65 and not TMI in 20 series	UU
69	00
72	86
73	87
74	72
75	96
77	43
81	94
82	88
83	61
84	44
85	58
86	64
87	59
88	93
97	99
98	Blank
99	00
00	UU

TABLE 3-54. Detector Performance Conversion

NFIRS 4.1	NFIRS 5.0					
Detector Performance	L1 Block	L2 Block	L3 Block	L4 Block	L5 Block	L6 Block
1	Y			2	U	
2	Y			2	U	
3	Y			3		U
4	N					
5	Y			1		
8	N					
9	Y	U	U	U	U	U
0	N					

L1 Presence of Detectors
 L2 Detector Type
 L3 Detector Power Supply
 L4 Detector Operation
 L5 Detector Effectiveness
 L6 Detector Failure Reason

TABLE 3-55. Extinguishing Systems Conversion

NFIRS 4.1	NFIRS 5.0				
Sprinkler Performance	M1 Block	M2 Block	M3 Block	M4 Block	M5 Block
1	Y	U	U		
2	Y	U	4		U
3	Y	U	3	0	
8	N				
9	Y	U	U		
0	N				

M1 Presence of Automatic Extinguishing System
 M2 Type of Automatic Extinguishing System
 M3 Operation of Automatic Extinguishing System
 M4 Number of Sprinkler Heads opened
 M5 Reason system not effective

TABLE 3-56. Number of Stories Conversion

NFIRS 4.1	NFIRS 5.0
<i>Titled as "Building Height" in NFIRS 5.0</i>	
1	1
2	2
3	3*
4	5*
5	10*
6	18*
7	35*
8	50*
0	-

* Average for conversion

TABLE 3-57. Extent of Fire Damage Conversion

NFIRS 4.1	NFIRS 5.0
<i>Titled as "Fire Spread" in NFIRS 5.0</i>	
1	1
2	2
3	2
4	3
5	3
6	4
7	5
0	-

Civilian Casualty Module

TABLE 3-58. Affiliation Conversion

NFIRS 4.1	NFIRS 5.0
2	U
3	1

TABLE 3-59. Severity Conversion

NFIRS 4.1	NFIRS 5.0
1	2 group into moderate category
2	5

Sex. Converts directly from NFIRS 4.1 to NFIRS 5.0.

Familiarity with Structure. Does not convert - Not used in NFIRS 5.0.

TABLE 3-60. Location at Ignition Conversion

NFIRS 4.1	NFIRS 5.0				
	M1	M2	M3	M4	M5
1	4	1	*	*	Same as area of origin
2	1	1	*	-	-
3	3	2	*	-	-
4	3	2	-	-	-
5	3	3	-	-	-
6	3	3	-	-	-
8	-	-	-	-	-
9	0	-	-	-	-
0	U	-	-	-	-

* The Level of Fire Origin conversion table is used to determine the Story at Start and Story Where Injury Occurred. When the 4.1 Location at Ignition is 1 the Level of Fire Origin conversion table is used to determine the Story at Start and Story Where Injury Occurred. When the Location At Ignition is 2 or 3, the Level of Fire Origin table is used to determine only the Story at Start.

M1 Location at Time of Incident

M2 General Location at Time of Injury

M3 Story at Start of Incident

M4 Story Where Injury Occurred

M5 Specific Location at Time of Injury

TABLE 3-61. Level of Fire Origin Conversion

NFIRS 4.1 Level of Fire Origin	NFIRS 5.0 Story
1	001
2	002
3	003
4	004
5	006
6	008
7	N/A
8	001 and below grade box checked
9	-
0	-

TABLE 3-62. Condition Before Injury Conversion

NFIRS 4.1 Condition Before Injury	NFIRS 5.0 Human Factors
<i>Data converts to "Human Factors" in NFIRS 5.0</i>	
1	Asleep = True
2	Physical Disability = True
3	Impaired by alcohol = True
	Impaired by chemical = True
4	Physically restrained = True
5	Unattended = True
6	Unattended = True
7	Mentally disabled = True
8	N/A
9	N/A
0	N/A

TABLE 3-63. Condition Preventing Escape Conversion

NFIRS 4.1 Condition Preventing Escape	NFIRS 5.0 Contributing Factors
<i>Data converts to "Contributing Factors" in NFIRS 5.0</i>	
1	20
2	21
3	13
4	15
5	35
6	30
7	does not convert
8	NN
9	00
0	UU

TABLE 3-64. Activity at Time of Injury Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	0
0	U

TABLE 3-65. Cause of Injury Conversion

NFIRS 4.1	NFIRS 5.0
1	5
2	1
3	2
4	4
5	8
6	7
7	7
8	N
9	0
0	U

TABLE 3-66. Nature of Injury Conversion

NFIRS 4.1 Nature of Injury	NFIRS 5.0 Primary Apparent Symptom
<i>Data converts to "Primary Apparent Symptom" in NFIRS 5.0</i>	
1	11
2	12
3	01
4	21
5	32
6	UU
7	96
8	33
9	00
0	UU

TABLE 3-67. Part of Body Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	3
3	6
4	7
5	6
6	7
7	8
8	9
9	0
0	U

TABLE 3-68. Disposition Conversion

NFIRS 4.1	NFIRS 5.0
1	
2	
3	check box = true
4	check box = true
5	
6	
9	
0	

FireFighter Casualty Module

Type of Casualty. Does not convert - Not used in NFIRS 5.0.

TABLE 3-69. Gender Conversion

NFIRS 4.1	NFIRS 5.0
<i>Converts directly from NFIRS 4.1 to NFIRS 5.0</i>	
1	1
2	2
Blank	Blank

TABLE 3-70. Case Severity Conversion

NFIRS 4.1 Severity	NFIRS 5.0 Severity
1	1, 2, 3
2	4
3	5
4	6
5	7
6	7
8	Blank
0	U
Blank	Blank

TABLE 3-71. Primary Apparent Symptom Conversion (Sheet 1 of 2)

NFIRS 4.1 Primary Apparent Symptom	NFIRS 5.0 Primary Apparent Symptom
01	25
02	36
03	IT 10-19 = 01 IT 40-49 = 02 else 03
04	63
05	14
06	15
07	12
08	13
09	00
10	42
11	41
12	51
13	24
14	71
15	71
16	35
17	85
18	97
19	96
20	03
21	31
22	81
23	82

TABLE 3-71. Primary Apparent Symptom Conversion (Sheet 2 of 2)

NFIRS 4.1 Primary Apparent Symptom	NFIRS 5.0 Primary Apparent Symptom
24	64
25	92
26	52
27	65
28	32
29	32
30	57
31	73
32	91
33	93
34	72
35	21
36	95
37	53
38	00
39	61
40	98
41	56
42	55
43	03
44	22
45	67
46	23
47	44
48	91
49	66
50	50
51	33
52	43
53	34
54	97
55	54
59	00
98	NN
99	00
00	UU

TABLE 3-72. Primary Part of Body Conversion (Sheet 1 of 2)

NFIRS 4.1 Primary Part of Body	NFIRS 5.0 Primary Part of Body
<i>This data element is being called "Primary Area of Body Injured" in NFIRS 5.0</i>	
10	10
11	11
12	12
13	10
14	14
15	14
16	13
17	13
18	14
19	10
20	30
21	21
22	23
23	31
24	31
25	32
26	41
27	43
28	42
29	30
30	60
31	61
32	62
33	63
34	64
35	65
36	65
37	65
39	60
40	70
41	71
42	72
43	73
44	74
45	75
46	75
49	70
50	80

TABLE 3-72. Primary Part of Body Conversion (Sheet 2 of 2)

NFIRS 4.1 Primary Part of Body	NFIRS 5.0 Primary Part of Body
<i>This data element is being called "Primary Area of Body Injured" in NFIRS 5.0</i>	
51	22
52	81
53	81
54	82
55	83
56	84
57	85
58	80
59	80
61	51
62	42
63	43
71	91
72	91
73	91
74	92
75	93
76	91
77	92
78	93
98	NN
99	00
00	UU

TABLE 3-73. Patient Taken To

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Taken To" in NFIRS 5.0</i>	
1	1
2	4
3	0
4	5
5	5
6	6
7	8
9	0
0	U

TABLE 3-74. Assignment Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Usual Assignment" in NFIRS 5.0</i>	
1	1
2	2
3	3
4	4
5	5
6	6
7	7
9	0
0	U

TABLE 3-75. Number of Responses Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is being converted from a classified field to a numeric entry.</i>	
1	1
2	2
3	3
4	4
5	5
6	7*
7	10*
8	13*
9	0
0	Blank

* Average for conversion only

TABLE 3-76. Physical Condition at Time of Injury Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	2
3	0
4	4
9	0
0	U

Status of Injured Prior to Alarm. Does not convert.

TABLE 3-77. Firefighter Activity Conversion (Sheet 1 of 3)

NFIRS 4.1 Fire Fighter Activity	NFIRS 5.0 Activity at Time of Injury
<i>This data element is called "Activity at Time of Injury" in NFIRS 5.0</i>	
10	10
11	11
12	14 + Contributing Factor = 65
13	14
14	14
15	14
16	14
17	15
18	15
19	10
20	20
21	12
22	13
23	12
24	12
25	21
26	22
27	20
29	20
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
39	30
40	40
41	41
42	42
43	43
44	44
45	45
49	40
50	50
51	51
52	52

TABLE 3-77. Firefighter Activity Conversion (Sheet 2 of 3)

NFIRS 4.1 Fire Fighter Activity	NFIRS 5.0 Activity at Time of Injury
<i>This data element is called "Activity at Time of Injury" in NFIRS 5.0</i>	
53	53
54	54
55	55
56	56
59	50
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	60
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
79	70
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	80
91	91
92	92
93	93
94	94
95	95

TABLE 3-77. Firefighter Activity Conversion (Sheet 3 of 3)

NFIRS 4.1 Fire Fighter Activity	NFIRS 5.0 Activity at Time of Injury
<i>This data element is called "Activity at Time of Injury" in NFIRS 5.0</i>	
99	00
00	UU

TABLE 3-78. Where Injury/Accident Occurred (Sheet 1 of 2)

NFIRS 4.1 Where Injury Occurred	NFIRS 5.0			
	J1 = Where Injury Occurred	J2 = Stories from Grade	J3 = Specific Location	J4 = Vehicle Type
10	0			
11	3			
12	8			
13	3			
14	8			
15	1			
16	8			
19	0			
20	6		22	
21	6		22	
22	6	2	00	
23	6		23	
24	6		24	
25	6		25	
26	6		26	
27	6		27	
28	6		28	
29	6		22	
30	6	-3**	UU	
31	6	-3**	31	
32	6	-3**	32	
33	6	-3**	33	
34	6	-3**	34	
35	6	-3**	35	
36	6	-3**	36	
39	6	-3**	00	
40	5		49	
41	5	1	49	
42	5	3*	49	

* Stories 2-4 converted to 3
Stories 5-7 converted to 6
Stories 8 or above converted to 8

** -3 is used to indicate below grade for conversion only

TABLE 3-78. Where Injury/Accident Occurred (Sheet 2 of 2)

NFIRS 4.1 Where Injury Occurred	NFIRS 5.0			
	J1 = Where Injury Occurred	J2 = Stories from Grade	J3 = Specific Location	J4 = Vehicle Type
43	5	6*	49	
44	5	8*	49	
45	5		45	
49	5		49	
50	5	-3**	49	
51	5	-1	49	
52	5	-2	49	
53	5	-3**	53	
54	5	-3**	54	
59	5	-3**	49	
60	6		61	U
61	6		61	U
62	6		61	U
63	6		63	U
64	6		64	U
65	6		65	U
69	6		61	U
70	2		UU	
71	2		UU	
72	2		UU	
73	2		UU	
74	2		UU	
75	2		UU	
76	2		UU	
77	2		UU	
79	2		UU	
80	U		UU	
81	5		49	
82	5		49	
83	6		27	
84	6		22	
89	U		UU	
99	0		UU	
00	U		UU	

* Stories 2-4 converted to 3
 Stories 5-7 converted to 6
 Stories 8 or above converted to 8

** -3 is used to indicate below grade for conversion only

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 1 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I1 = Cause of Fire Fighter Injury	I2 = Factors Contributing to Injury	I3 = Object Involved in Injury
100	1	-	-
101	1	41	-
102	1	43	-
103	1	42	-
104	1	43	-
105	1	42	-
106	3	-	-
107	3	52	-
108	3	51	-
109	3	50	-
110	1	-	35
111	1	-	22
112	1	-	30
113	1	65	26
114	1	65	26
115	3	-	26
116	1	-	28
117	1	-	31
199	1	-	
200	U	30	-
201	U	11	30
202	U	12	30
203	U	13	30
204	U	14	30
205	U	21	30
206	U	22	30
207	U	23	30
208	U	24	30
209	U	16	30
210	U	30	-
211	U	32	-
212	U	30	26
213	U	17	42
214	U	34	-
299	U	30	-
300	5	-	-
301	5	11	-
302	5	12	-

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 2 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I1 = Cause of Fire Fighter Injury	I2 = Factors Contributing to Injury	I3 = Object Involved in Injury
303	5	14	-
304	5	12	-
305	5	16	39
306	5	16	39
307	5	16	42
308	5	16	43
309	5	16	43
310	5	16	43
311	5	-	15
312	5	-	14
313	5	-	18
314	5	16	22
315	5	-	23
316	5	-	13
317	5	-	11
318	5	60	26
319	5	60	94
320	5	16	-
321	5	-	-
322	5	-	27
323	5	-	32
324	5	-	23
325	5	-	90
399	5	-	-
400	6	-	-
401	6	-	64
402	6	-	47
403	6	-	49
404	6	-	48
405	6	-	64
406	6	-	46
407	6	-	45
408	6	-	43
409	6	-	16
410	6	-	17
411	4	-	53
412	4	-	53
413	4	-	53
414	4	-	56

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 3 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I1 = Cause of Fire Fighter Injury	I2 = Factors Contributing to Injury	I3 = Object Involved in Injury
415	6	-	61
416	6	-	63
417	6	16	-
418	6	-	55
419	6	-	54
420	4	-	51
421	4	-	62
499	6	-	-
500	7	-	-
501	7	-	12
502	7	-	22
503	7	-	23
504	7	-	91
505	7	-	92
506	7	-	-
507	7	-	-
508	7	-	12
509	7	-	22
510	7	-	23
511	7	-	91
512	7	-	92
513	7	-	-
514	7	-	-
515	7	-	13
516	7	-	22
517	7	-	23
518	7	-	91
519	7	-	92
520	7	-	-
521	7	-	-
522	7	-	-
523	7	-	22
524	7	-	35
525	7	-	36
526	7	-	-
599	7	-	-
600	2	-	-
601	2	-	22
602	2	-	37

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 4 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I1 = Cause of Fire Fighter Injury	I2 = Factors Contributing to Injury	I3 = Object Involved in Injury
603	2	-	38
604	2	-	30
605	2	-	26
699	2	-	-
700	6	62	26
701	6	62	26
702	6	63	91
703	6	63	-
704	6	-	26
705	6	-	26
706	6	61	26
707	6	61	26
799	6	62	26
800	5	-	-
801	5	92	91
802	5	91	91
803	5	92	-
804	5	92	-
805	5	92	95
806	5	-	93
899	5	-	-
999	0	-	-
000	U	-	-

Medical Care Provided. Data element not used in NFIRS 5.0.

TABLE 3-80. Protective Coat Worn Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	21
2	21
3	21
4	21
5	21
6	21
7	21
8	21
9	NN
0	21

Status Of Protective Coat. Does not convert - Not used in NFIRS 5.0.

TABLE 3-81. Problem with Protective Coat

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Problem" in NFIRS 5.0</i>	
1	11
2	25
3	12
4	25
5	31
7	NN
8	-
9	00
0	UU

TABLE 3-82. Protective Trousers Worn Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	22
2	22
3	22
4	22
5	22
6	22
7	22
8	22
9	NN
0	22

Status Of Protective Trousers. Does not convert - Not used in NFIRS 5.0.

TABLE 3-83. Problem with Protective Trousers Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Problem" in NFIRS 5.0</i>	
1	11
2	25
3	12
4	25
5	31
7	NN
8	
9	00
0	UU

TABLE 3-84. Boots/Shoes being Worn Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	31
2	32
3	33
4	34
5	36
6	37
7	35
8	38
9	30
0	UU

Status of Boots/Shoes. Does not convert - Not used in NFIRS 5.0.

TABLE 3-85. Problems with Boots/Shoes Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is being called "Equipment Problem" in NFIRS 5.0</i>	
1	11
2	25
3	25
4	22
5	33
6	41
8	
9	00
0	UU

TABLE 3-86. Helmet being Worn Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	11
2	11
3	11
4	11
8	NN
9	11
0	UU

Status of Helmet. Does not convert - Not used in NFIRS 5.0.

TABLE 3-87. Problem with Helmet Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Problem" in NFIRS 5.0</i>	
1	11
2	12
3	21
4	22
5	24
7	
8	
9	00
0	UU

TABLE 3-88. Face Protection being Worn Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	12
2	13
3	14
8	NN
9	00
0	UU

TABLE 3-89. Problem with Face Protection Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Problem" in NFIRS 5.0</i>	
1	11
2	12
3	21
4	23
7	-
8	-
9	00
0	UU

TABLE 3-90. Breathing Apparatus Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	41
2	42
3	43
4	44
8	NN
9	40
0	UU

Status of Breathing Apparatus. Does not convert - Not used in NFIRS 5.0.

TABLE 3-91. Problem with Breathing Apparatus Conversion

NFIRS 4.1	NFIRS 5.0
Problem with Breathing Apparatus	Equipment Problem
<i>This data element is called "Equipment Problem" in NFIRS 5.0</i>	
11	11
12	25
13	12
14	21
15	42
16	43
19	00
10	UU
21	11
22	25
23	12
24	44
29	00
20	UU
31	45
32	46
33	47
39	00
30	UU
41	48
42	49
49	00
40	UU
51	51
52	52
53	53
59	00
50	UU
97	-
98	-
99	00
00	UU

TABLE 3-92. Gloves being Worn Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	50
2	50
3	50
4	50
5	50
6	50
7	50
8	NN
9	50
0	UU

TABLE 3-93. Problem with Gloves Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Problem" in NFIRS 5.0</i>	
1	11
2	25
3	12
4	22
5	33
6	32
7	-
8	-
9	00
0	UU

TABLE 3-94. Special Equipment Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
1	61
2	65
3	72
4	71
5	73
6	74
7	77
8	NN

TABLE 3-94. Special Equipment Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Item" in NFIRS 5.0</i>	
9	70
0	UU

Special Equipment Status. Does not convert - Not used in NFIRS 5.0.

TABLE 3-95. Special Equipment Problems Conversion

NFIRS 4.1	NFIRS 5.0
<i>This data element is called "Equipment Problem" in NFIRS 5.0</i>	
1	11
2	25
3	12
4	95
5	96
6	97
7	-
8	-
9	00
0	UU

Hazardous Materials Module

TABLE 3-96. Special HazMat Response Action (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
16	51
31	22
32	23
33	30
34	73
35	21
36	34
37	52
41	41
42	42
43	53
44	55
45	45
46	46

Note: Up to 2 Actions Taken are reported on the basic module in the Actions Taken fields 2 and 3. No conversion is made to Special HazMat Actions Taken on the HazMat module.

TABLE 3-96. Special HazMat Response Action (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
47	47
51	71
53	92
54	66
55	62
56	63
57	72
61	77
62	78
63	82
64	83
71	86
72	93
73	64
81	61
82	65
91	85
92	84
97	54
98	NN
99	00
00	UU

Note: Up to 2 Actions Taken are reported on the basic module in the Actions Taken fields 2 and 3. No conversion is made to Special HazMat Actions Taken on the HazMat module.

TABLE 3-97. General Property Use (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
<i>Convert only if not a fire and put result in "Mixed Property" field on basic form.</i>	
11	10
12	10
13	10
14	10
15	10
16	10
18	10
21	20
22	20
31	33
32	33
33	33
34	33

TABLE 3-97. General Property Use (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
<i>Convert only if not a fire and put result in "Mixed Property" field on basic form.</i>	
36	00
40	58
41	40
42	40
43	40
44	40
45	40
47	40
51	00
52	00
59	59
61	60
62	60
63	63
64	00
65	65
66	-
67	60
70	60
80	-
91	-
92	-
93	-
94	-
95	-
96	-
97	-
98	-
99	00
00	UU

TABLE 3-98. Level of Release Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
10	Released From = 1 and Story = 2
11	Released From = 1 and Story = 1
12	Released From = 1 and Story = 2
13	Released From = 1 and Story = 3
14	Released From = 1 and Story = 4
15	Released From = 1 and Story = 7

TABLE 3-98. Level of Release Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
16	Released From = 1 and Story = 13
17	Released From = 1 and Story = 18
18	Released From = 1 and Story = 21
20	Released From = 1 and Story = -1
21	Released From = 1 and Story = -1
22	Released From = 1 and Story = -2
23	Released From = 1 and Story = -3
24	Released From = 1 and Story = -4
25	Released From = 1 and Story = -7
26	Released From = 1 and Story = -13
27	Released From = 1 and Story = -18
28	Released From = 1 and Story = -21
30	Released From = 2 and Story = 2
31	Released From = 2 and Story = 1
32	Released From = 2 and Story = 2
33	Released From = 2 and Story = 3
34	Released From = 2 and Story = 4
35	Released From = 2 and Story = 7
36	Released From = 2 and Story = 13
37	Released From = 2 and Story = 18
38	Released From = 2 and Story = 21
40	Released From = 2 and Story = -1
41	Released From = 2 and Story = -1
42	Released From = 2 and Story = -2
43	Released From = 2 and Story = -3
44	Released From = 2 and Story = -4
45	Released From = 2 and Story = -7
46	Released From = 2 and Story = -13
47	Released From = 2 and Story = -18
48	Released From = 2 and Story = -21
00	UU

TABLE 3-99. Release Factor Conversion (Sheet 1 of 3)

NFIRS 4.1	NFIRS 5.0	
Release Factor	Cause of Release	Factor contributing to release
11	1	
21	2	
30	2	30
31	2	31
32	2	32

TABLE 3-99. Release Factor Conversion (Sheet 2 of 3)

NFIRS 4.1	NFIRS 5.0	
Release Factor	Cause of Release	Factor contributing to release
33	2	33
34	2	34
37	2	37
38	2	38
39	2	30
40	2	40
42	2	42
43	2	43
45	2	45
46	2	46
47	2	47
48	2	48
49	2	40
50	3	50
51	3	51
52	3	52
53	3	53
54	3	54
55	3	55
56	3	56
59	3	50
60	3	60
61	3	61
62	3	62
64	3	64
69	3	60
70	2	70
71	2	71
72	2	72
73	2	73
74	2	74
75	2	75
76	2	76
77	2	77
78	2	78
79	2	70
80	4	80
81	4	81
82	4	82
83	4	83

TABLE 3-99. Release Factor Conversion (Sheet 3 of 3)

NFIRS 4.1	NFIRS 5.0	
Release Factor	Cause of Release	Factor contributing to release
84	4	84
85	4	85
86	4	86
87	4	87
88	4	88
89	4	80
90	U	-
91	4	91
92	2	92
93	2	93
94	2	- I = U
95	2	- I = U
96	2	- I = U
97	2	97
98	-	-
99	U	-
00	U	-

I is the question "If fire or explosion is involved with a release, which occurred first?"

Type of Weather. Does not convert - Not used in NFIRS 5.0.

Air Temperature. Does not convert - Not used in NFIRS 5.0.

Estimated Number of Chemicals. Does not convert - Not used in NFIRS 5.0.

TABLE 3-100. Disposition Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	-
0	-

Personnel Identifying HazMat. Does not convert - Not used in NFIRS 5.0.

Reference Material. Does not convert - Not used in NFIRS 5.0.

Number of Injuries. Direct convert of numeric field.

Number of Fatalities. Direct convert of numeric field.

TABLE 3-101. DOT Hazard Class Conversion

NFIRS 4.1	NFIRS 5.0
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
0	UU

CAS Number. Direct conversion.

Physical State Stored. Does not convert - Not used in NFIRS 5.0.

Extent Of Release. Does not convert - Not used in NFIRS 5.0.

TABLE 3-102. Physical State Released Conversion

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
0	U

Quantity Released Units. All classifications convert directly.

TABLE 3-103. Suspected Environmental Damage Conversion

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
<i>This data element is called "Released Into" in NFIRS 5.0.</i>	
9	0
0	U

Container Use. Does not convert - Not used in NFIRS 5.0.

Special Container Feature. Does not convert - Not used in NFIRS 5.0.

TABLE 3-104. Container Type Conversion

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
98	NN
99	00
00	UU

Container Material. Does not convert - Not used in NFIRS 5.0.

Container Capacity. All classifications convert directly.

Unit of Measure. All classifications convert directly.

TABLE 3-105. Mobile Property Type/Transport Type Conversion

NFIRS 4.1	NFIRS 5.0
<i>All classifications convert directly except as noted below</i>	
00	UU
08	blank
13	18
19	10
29	20
39	30
49	49, but may include some boats that are not sailboats
58	50
59	50
67	74
68	75
69	60
79	70
99	90

*73, 74, and 75 are valid classifications in the hazmat table and will directly convert to the same number.

Vehicle Id. Does not convert - Not used in NFIRS 5.0.

ICC/DOT Number. All numbers convert directly.

TABLE 3-106. Equipment Involved in Release Conversion

NFIRS 4.1	NFIRS 5.0
<i>Except for the codes listed below, all codes convert the same as for the Equipment Involved in Ignition (Table 3-48)</i>	
01	Blank
02	Blank
03	Blank

TABLE 3-106. Equipment Involved in Release Conversion

NFIRS 4.1	NFIRS 5.0
<i>Except for the codes listed below, all codes convert the same as for the Equipment Involved in Ignition (Table 3-48)</i>	
04	Blank
05	Blank
06	Blank
07	Blank
08	Blank
09	Blank
91	311
92	500
93	200
94	251
95	300
96	300
97	300

NFIRS 5.0 Vendor Software Development Procedures

The United States Fire Administration (USFA) will no longer certify vendor transaction files for the NFIRS 5.0. The USFA will instead maintain a list of fire software vendors that have registered with USFA to obtain NFIRS 5.0 development materials and the vendor validation tool. We will also maintain vendors' readiness status' on the list based on their reports to us on their status.

The new procedure has 5 steps:

- 1) Vendors will register their company/organization and their software to receive a vendor ID and a software ID. This step is the same as in the previous certification procedure. All transaction files processed at the national level are required to have these two IDs embedded in the transaction file as specified in the design documentation.
- 2) Vendors will be requested to develop software using the NFIRS 5.0 design documentation and then test their output transaction files using the validation tools USFA provides for those purposes. NFIRS design documentation, validation software and other information may be downloaded from the registration website at www.nfirs.fema.gov.
- 3) Vendors are requested to notify USFA when their product development is completed and tested to be compatible with the national NFIRS 5.0 database standard.
- 4) Vendors who have notified USFA in step 3 above will be marked as "active" vendors on the registered list. This new status will supersede the previous two status categories of "conditionally certified" and "fully certified".
- 5) Fire Departments and states may use the USFA maintained list of vendors as a resource when shopping for a software product.

Because the USFA will no longer nationally certify vendor's NFIRS 5.0 transaction files formats, it will be extremely important for state agencies, fire departments and vendors to continue monitoring data quality issues.

State agencies are the authority for state reporting compliance. Issues with NFIRS vendor files should be addressed by the fire department, the vendor and the state involved. The USFA will continue to act as a resource for states to identify data problems at the national level.

Vendors should retest their software after software revisions or version changes.

In order to maintain a uniform National reporting standard:

Fire departments should make sure they have the most current version of the vendor software installed.

States and fire departments need to ensure that their vendor's data files remain compatible with the national system.

Query and Reporting Requirements

Reporting Requirements

All database inputs to the standard reports defined below will have definable database filters which can be set by the report user prior to report generation. The filter will consist of predefined field parameters that will allow generation of data subsets based on the values entered before report generation. Field parameters will consist of a range of values or values greater, less than or equal to a designated value. Those parameters that require ranges of values are designated by “(range of)” after the parameter field name. Text field parameters require the ability to do partial searches and the use of wildcard characters. More complex queries involving the use of the Boolean logical “or” statement or combinations of Boolean “and/or” logic will require use of ad hoc query capabilities described at the end of these reporting requirements. Note that not all field parameters may be available for each report depending on the report type. The following is a total list of all NFIRS 5.0 field parameters (subdivided by module):

All Incidents

State	Mixed Property Use (range of)
FDID	Property Use (range of)
Incident Number (range of)	Business Entity Involved Name
Exposure Number (range of)	Business Entity Involved Phone Number
Station (range of)	Person Involved Name Prefix
Incident Location text fields (Wildcard/Partial String)	Person Involved First Name
Location Type	Person Involved Middle Initial
Location State	Person Involved Last Name
ZIP Code (range of)	Person Involved Name Suffix
Census Tract (range of)	Person Involved Address Number
Incident Date Month (range of)	Person Involved Street Prefix
Incident Date Day (range of)	Person Involved Address Street Name
Incident Date Year (range of)	Person Involved Address Street Type
Incident Date Hour/Minute (range of)	Person Involved Address Street Suffix
Day of Week (calculated, range of)	Person Involved Post Office Box
Incident Type (range of)	Person Involved Apartment/Suite/Room
Aid Given or Received	Person Involved City
Their FDID	Person Involved State
Their State	Person Involved ZIP Code (range of)
Their Incident Number	Business Owner Name
Action Taken #1 (range of)	Business Owner Phone Number
Action Taken #2 (range of)	Owner Name Prefix
Action Taken #3 (range of)	Owner First Name
Suppression Resources (range of)	Owner Middle Initial
EMS Resources (range of)	Owner Last Name
Other Resources (range of)	Owner Name Suffix
Counts Mutual Aid Resources	Owner Address Number
Property \$Loss (range of)	Owner Street Prefix
Contents \$Loss (range of)	Owner Address Street Name
Total \$Loss (range of)	Owner Address Street Type
Fire Service Injuries (range of)	Owner Address Street Suffix
Fire Service Deaths (range of)	Owner Post Office Box
Civilian injuries (range of)	Owner Apartment/Suite/Room
Civilian Deaths (range of)	Owner City
Detector Alerted Occupants	Owner State
Hazardous Materials Release	Owner ZIP Code (range of)

Fire Incidents

Fire Cause (range of)	Equipment Involved in Ignition (range of)
Factors Contributing to Ignition #1-#2 (range of)	Equipment Power Source (range of)
Human Factors Contributing to Ignition (any combination of)	Equipment Portability
Estimated Age of Person Involved (range of)	Brand
Area of Origin (range of)	Model
Heat Source (range of)	Year
Item First Ignited (range of)	Fire Suppression Factors #1-#3 (range of)
Type Material First Ignited (range of)	Mobile Property Type (range of)
On-Site Material #1-#3 (range of)	Mobile Property Make
On-Site Material Storage Use #1-#3	Mobile Property Model (wildcard/partial)
Number of Residential Living Units (range of)	Mobile Property Year
Number of Buildings Involved (range of)	Mobile Property State
Acres Burned (range of)	Fire Spread (range of)

Structure Fire Incidents Only

Structure Type (range of)	Type Material Contributing Most to Flame Spread (range of)
Building Status (range of)	Presence of Detectors
Total Stories Above Grade (range of)	Detector Type
Total Stories Below Grade (range of)	Detector Power Supply (range of)
Total Square Feet (range of)	Detector Operation
Building Length (range of)	Detector Effectiveness
Building Width (range of)	Reason for Detector Failure
Story of Fire Origin (range of)	Presence of Automatic Extinguishment System
Number of Stories Damaged by Flame, 1%-24% (range of)	Automatic Extinguishment System Type (range of)
Number of Stories Damaged by Flame, 25%-49% (range of)	Automatic Extinguishment System Operation (range of)
Number of Stories Damaged by Flame, 50%-74% (range of)	Number of operating Sprinkler Heads (range of)
Number of Stories Damaged by Flame, 75%-100% (range of)	Reason for Automatic Extinguishment System Failure
Item Contributing Most to Flame Spread (range of)	

Civilian Fire Casualty Incidents Only

Injured Person First Name(Wildcard/Partial String)	Cause of Injury (range of)
Injured Person Last Name(Wildcard/Partial String)	Human Factors Contributing to Injury (Any Combination of)
Sex	Factors Contributing to Injury #1-#3 (range of)
Casualty Number (range of)	Activity When Injured (range of)
Age (range of)	Location at Time of Injury (range of)
Race	General Location At Time of Injury (range of)
Ethnicity	Story Location at Start of Incident (range of)
Affiliation (range of)	Story Where Injury Occurred (range of)
Injury Date Month (range of)	Specific Location at Time of Injury (range of)
Injury Date Day (range of)	Primary Apparent Symptom (range of)
Injury Date Year (range of)	Primary Area of Body Injured (range of)
Injury Date Hour/Minute (range of)	Disposition
Severity (range of)	

Fire Service Casualty Incidents Only

Injured Firefighter First Name(Wildcard/Partial String)
 Injured Firefighter Last Name(Wildcard/Partial String)
 Sex
 Career Status
 Casualty Number (range of)
 Age (range of)
 Injury Date Month (range of)
 Injury Date Day (range of)
 Injury Date Year (range of)
 Injury Date Hour/Minute (range of)
 Number of Prior Responses (range of)
 Usual Assignment (range of)
 Physical Condition Just Prior to Injury
 Severity (range of)
 Taken To (range of)
 Activity at time of Injury (range of)

Primary Apparent Symptom (range of)
 Primary Area of Body Injured (range of)
 Cause of fire Fighter Injury (range of)
 Factor Contributing to Injury (range of)
 Object involved in Injury (range of)
 Where Injury Occurred (range of)
 Story Where Injury Occurred (range of)
 Specific Location Where Injury Occurred (range of)
 Vehicle Type Where Injury Occurred (range of)
 Did Protective Equipment Fail?
 Equipment Sequence Number (range of)
 Protective Equipment Item (range of)
 Protective Equipment Problem (range of)
 Manufacturer
 Model

EMS Incidents Only

Number of Patients (range of)
 Patient Number (range of)
 Time arrived at Patient Month (range of)
 Time arrived at Patient Day (range of)
 Time arrived at Patient Year (range of)
 Time arrived at Patient Hour/Minute (range of)
 Time of Patient Transfer Month (range of)
 Time of Patient Transfer Day (range of)
 Time of Patient Transfer Year (range of)
 Time of Patient Transfer Hour/Minute (range of)
 Provider Impression Assessment
 Age (range of)
 Race
 Ethnicity
 Human Factors Contributing to Injury (Any Combination of)
 Other Factors (range of)

Body Site of Injury
 Injury Type
 Cause of Injury or Illness (range of)
 Procedures Used (any combination of)
 Safety Equipment (range of)
 Pre-Arrival Cardiac Arrest?
 Witnessed?
 Bystander CPR?
 Post Arrival Arrest?
 Initial Arrest Rhythm
 Initial Level of Provider (range of)
 Highest Level of Provider at Scene (range of)
 Patient Status
 Pulse on Transfer?
 Disposition (range of)

HAZMAT Incidents Only

Chemical Name (Wildcard/Partial String)
 UN Number
 Dot Hazard Class (range of)
 CAS Registration Number
 Container Type (range of)
 Container Capacity (range of)
 Units: Capacity
 Estimated Amount Released (range of)
 Units: Released
 Physical State when Released (range of)
 Released Into (range of)
 Story of Release (range of)
 Released From
 Population Density (range of)
 Area Affected (range of)
 Area Affected: Units
 Area Evacuated (range of)
 Area Evacuated: Units
 People Evacuated (range of)
 Buildings Evacuated (range of)
 HazMat Action Taken #1 (range of)
 HazMat Action Taken #2 (range of)

HazMat Action Taken #3 (range of)
 Release Sequence
 Cause of Release
 Factor Contributing to Release #1 (range of)
 Factor Contributing to Release #2 (range of)
 Factor Contributing to Release #3 (range of)
 Factor Affecting Mitigation #1 (range of)
 Factor Affecting Mitigation #2 (range of)
 Factor Affecting Mitigation #3 (range of)
 Equipment Involved in Release (range of)
 Equipment Involved in Release Brand
 Equipment Involved in Release Model
 Equipment Involved in Release Year
 Mobile Property Involved in Release Type (range of)
 Mobile Property Involved in Release Make
 Mobile Property Involved in Release Model (wildcard/partial)
 Mobile Property Involved in Release Year
 Mobile Property Involved in Release State
 License Plate Number
 DOT/ICC Number
 HazMat Disposition (range of)

Wildland Fire Incidents Only

Latitude (range of)	Number of Buildings threatened (range of)
Longitude (range of)	Total Acres Burned (range of)
Township	Primary Crop Burned #1 (Wildcard/Partial)
Township North/South	Primary Crop Burned #2 (Wildcard/Partial)
Range	Primary Crop Burned #3 (Wildcard/Partial)
Range East/West	Property Owner
Section	Federal Agency Code
Subsection	% Total Acres Burned Owned by Undetermined (range of)
Meridian (range of)	% Total Acres Burned Owned by Tax Paying (range of)
Area Type (range of)	% Total Acres Burned Owned by Non Tax Paying (range of)
Wildland Fire Cause (range of)	% Total Acres Burned Owned by City/Town/Village (range of)
Human Factors Contributing to Ignition (any combination of)	% Total Acres Burned Owned by County/Parish (range of)
Factors Contributing to Ignition #1 (range of)	% Total Acres Burned Owned by State or Province (range of)
Factors Contributing to Ignition #2 (range of)	% Total Acres Burned Owned by Federal (range of)
Fire Suppression Factors #1 (range of)	% Total Acres Burned Owned by Foreign (range of)
Fire Suppression Factors #2 (range of)	% Total Acres Burned Owned by Military (range of)
Fire Suppression Factors #3 (range of)	% Total Acres Burned Owned by Other (range of)
Heat Source (range of)	NFDRS Fuel Model at Origin (range of)
Mobile Property Type (range of)	Person Responsible for Fire
Equipment Involved in Ignition (range of)	Gender of Person Involved
NFDRS Weather Station ID	Age of Person Involved (range of)
Weather Type (range of)	Activity of Person Involved (range of)
Wind Direction (range of)	Feet From Right of Way (range of)
Wind Speed (range of)	Type of Right of Way (range of)
Air Temperature (range of)	Elevation (range of)
Relative Humidity (range of)	Relative Position on Slope
Fuel Moisture% (range of)	Aspect
Fire Danger Rating (range of)	Flame Length (range of)
Number of Buildings Ignited (range of)	Rate of Spread (range of)

Arson Fire Incidents Only

Agency Name Referred To	Extent of Fire Involvement on Arrival
Street Address	Methods/Devices (range of)
City	Other Investigative Information
State	Property Ownership (range of)
ZIP Code	Initial Observations
Their Case Number	Assisting Agencies (range of)
Their ORI	Laboratory Used (range of)
Their FID	Subject Number (range of)
Their FDID	Age (range of)
Case Status	Gender
Offender Status	Race
Suspected Motivation Factor #1	Ethnicity
Suspected Motivation Factor #2	Family Type (range of)
Suspected Motivation Factor #3	Motivation/Risk Factors (range of)
Apparent involvement (range of)	Disposition (range of)
Entry Method (range of)	

Apparatus or Resources Local Reporting Only

Apparatus ID	Clear Month (range of)
Type Apparatus/Resource (range of)	Clear Day (range of)
Dispatch Month (range of)	Clear Year (range of)
Dispatch Day (range of)	Clear Hour (range of)
Dispatch Year (range of)	Number of People (range of)
Dispatch Hour (range of)	Use
Arrival Month (range of)	Action Taken #1 (range of)
Arrival Day (range of)	Action Taken #2 (range of)
Arrival Year (range of)	Action Taken #3 (range of)
Arrival Hour (range of)	Action Taken #4 (range of)

Personnel Local Reporting Only

Apparatus ID	Clear Year (range of)
Type Apparatus/Resource (range of)	Clear Hour (range of)
Dispatch Month (range of)	Number of People (range of)
Dispatch Day (range of)	Use
Dispatch Year (range of)	Action Taken #1 (range of)
Dispatch Hour (range of)	Action Taken #2 (range of)
Arrival Month (range of)	Action Taken #3 (range of)
Arrival Day (range of)	Action Taken #4 (range of)
Arrival Year (range of)	Personnel ID
Arrival Hour (range of)	Name
Clear Month (range of)	Rank or Grade (range of)
Clear Day (range of)	

All report outputs may be in a variety of user definable formats including printed output, ascii delimited text files and Adobe Acrobat files. As needed, the reports below can be produced with output (detail fields only) in ASCII delimited file format so that the report output can be loaded into a separate database table.

Tally Report

Frequency count of codes by element that includes summary information of loss measures for each code within the element and the percentage of the total for each code. This query/report will be similar to the existing Tally report.

- Must allow selection of report filter criteria using the field parameter list defined above.
- Must allow selection of a subset of coded fields that the Tally Report will be run against. (The NFIRS 4.1 Tally Report automatically runs against all coded fields in the system). Example: A Tally report that generates detail line information for two selected fields, Property Use and Area of fire origin. The report filter was set to generate the report for Incident type range 110-118 (all structure fires).
- Generates standard outputs as defined above.

The following fields will be included on the report:

Page header information including:
Name of the Report
Run Date
NFIRS Data Year
The Database Filter in Effect
Name of the Coded Element
Report Field Descriptions

Detail line information including:

Field Code (also to include blank or invalid codes)	Number of Fire Service Injuries
Field Code Descriptor	Percent of Total Fire Service Injuries
Frequency Count (number of incidents)	Property Dollar Loss
Percent of Total (for frequency)	Percent of Total Property Dollar Loss
Number of Non Fire Service Deaths	Contents Dollar Loss
Percent of Total Non Fire Service Deaths	Percent of Total Contents Dollar Loss
Number of Non Fire Service Injuries	Total Estimated Dollar Loss (This will be property loss + contents loss)
Percent of Total Non Fire Service Injuries	Percent of Total Estimated Dollar Loss
Number of Fire Service Deaths	
Percent of Total Fire Service Deaths	

The detail portion of the report will repeat for each coded field that was selected to be included in the report.

Summary line information (for each selected coded field) including:

Field Code (also to include blank or invalid codes)	Number of Fire Service Injuries
Field Code Descriptor	Percent of Total Fire Service Injuries
Frequency Count (total number of incidents)	Property Dollar Loss
Percent of Total (for frequency)	Percent of Total Property Dollar Loss
Number of Non Fire Service Deaths	Contents Dollar Loss
Percent of Total Non Fire Service Deaths	Percent of Total Contents Dollar Loss
Number of Non Fire Service Injuries	Total Estimated Dollar Loss (This will be property loss + contents loss)
Percent of Total Non Fire Service Injuries	
Number of Fire Service Deaths	Percent of Total Estimated Dollar Loss
Percent of Total Fire Service Deaths	

Fire Cause Categories Report

Using the established methodology determining fire cause categories, the report will produce summary information on losses for each cause category. The report will have the following features:

- The database input to the report will have a filter at the front as defined above.
- The user can select a subset of the cause categories to run the report on.
- Generates standard outputs as defined above.

Note: The methodology for determining cause categories is currently under revision and will be available in the January 2002 specification release.

If a fire cause meets the criteria of more than one category it should be placed in the category with the lowest number in the list above.

Rates per 1,000 fires are calculated as follows:

One thousand divided by the number of items in the data set where the loss measure occurred (e.g. all fires) times the loss measure for which the rate is determined (e.g. civilian fire deaths) This reduces to the following formula:

$$(1,000 / \text{All Fires}) * \text{Civilian Fire Deaths} = \text{Rate}$$

The following fields will be included on the report:

Page header information including:

Name of the Report
Run Date
NFIRS Data Year
The Date Filter in Effect
Report Field Descriptions

Detail line information including:

Cause Category Descriptor	Rate per 1,000 fires
Report field code and descriptor	Rate per 1,000 fires
Frequency Count (number of fires)	Percent of Total Fire Service Injuries
Percent of Total Fires	Rate per 1,000 fires
Rate per 1,000 fires	Total Property Dollar Loss
Number of Non Fire Service Deaths	Percent of Total Property Dollar Loss
Percent of Total Non Fire Service Deaths	Contents Dollar Loss
Rate per 1,000 fires	Percent of Total Contents Dollar Loss
Number of Non Fire Service Injuries	Total Estimated Dollar Loss (property loss + contents loss).
Percent of Total Non Fire Service Injuries	Percent of Total Estimated Dollar Loss

Summary line information (for each fire cause) including:

Cause Category Descriptor	Rate per 1,000 fires
Frequency Count (number of fires)	Number of Fire Service Deaths
Percent of Total (for number of fires,)	Percent of Total
Rate per 1,000 fires	Rate per 1,000 fires
Number of Non Fire Service Deaths	Number of Fire Service Injuries
Percent of Total	Percent of Total
Rate per 1,000 fires	Rate per 1,000 fires
Number of Non Fire Service Injuries	Total Estimated Dollar Loss (property loss + contents loss).
Percent of Total	

Total line for all cause categories:

Frequency Count (number of fires)	Rate per 1,000 fires
Percent of Total (for number of fires,)	Number of Fire Service Deaths
Rate per 1,000 fires	Percent of Total
Number of Non Fire Service Deaths	Rate per 1,000 fires
Percent of Total	Number of Fire Service Injuries
Rate per 1,000 fires	Percent of Total
Number of Non Fire Service Injuries	Rate per 1,000 fires
Percent of Total	Total Estimated Dollar Loss (property loss + contents loss).

FIRE CAUSE CATEGORIES REPORT

Report Run Date mm/dd/yyyy

yyyy (yyyy, ...) NFIRS Data

Data Filter (filter in effect)

Property Use Range Selected (range in effect)

Category

Property Use	FREQUENCY ALL	% OF ALL	RATE ALL	CIVILIAN DEATHS	% OF ALL	RATE ALL	CIVILIAN INJURIES	% OF ALL	% OF RATE ALL	PROPERTY \$ LOSS	% OF ALL	CONTENTS \$ LOSS	% OF ALL	TOTAL \$ LOSS	% OF ALL
INTENTIONAL															
419 One or two family dwelling	9,999,999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x
429 Multi family dwelling	9,999,999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x
TOTALS FOR CATEGORY	9,999,999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x
PLAYING WITH HEAT SOURCE															
419 One or two family dwelling	9,999,999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x
429 Multi family dwelling	9,999,999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x
TOTALS FOR CATEGORY	9,999,999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x
TOTALS FOR ALL CATEGORIES	9,999,999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	999,999	%xxxx.x	9999.9	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x	\$9,999,999,999	%xxxx.x

Page 999

Rates: Are calculated as followed:

Frequency Rate: (1000/Total fires for Fire Cause Category (i.e. Intentional)) * Total Number of Fires for Property Type (i.e 419, One or two family Dwelling))
 Civilian Deaths: (1000/Total Civilian Deaths for Fire Cause Category (i.e. Intentional)) * Total Number of Civilian Deaths for Property Type (i.e 419, One or two family Dwelling))
 Civilian Injuries: (1000/Total Civilian Injuries for Fire Cause Category (i.e. Intentional)) * Total Number of Civilian Injuries for Property Type (i.e 419, One or two family Dwelling))

Percentages: Should be calculated against totals for each category

Fire Department Information Report

The report will produce FDID Header information for each Fire Department. The report will have the following features:

- *The database input to the report will have a filter at the front end.*
- *The report Output will go to a file that can be viewed or printed. It may be an Adobe Acrobat file.*

The following fields will be included on the report:

Page header information including:

Name of the Report
Run Date
NFIRS Data Year
The Database Filter in Effect
Fire Department Name

Detail line information including:

Fire Department ID	Number Fire Service Deaths
Fire Department Address	Number Fire Service Injuries
Fire Department County	Number Civilian Deaths
State	Number Civilian Injuries
Population Density	Dollar Loss
Square Miles	Number Paid Firefighters
Number of Incidents	Number Unpaid Firefighters

Summary line information including:

State
Number of Incidents
Square Miles
Number Fire Service Deaths
Number Fire Service Injuries
Number Civilian Deaths
Number Civilian Injuries
Dollar Loss
Number Paid Firefighters
Number Unpaid Firefighters

Cross Tabulation Report

The report will produce a cross-tabulation or matrix with any two coded fields in the database. The report will have the following features:

- The database input to the report will have a filter at the front end.
- The report output will go to a file that can be viewed or printed or to an ASCII delimited file. The print/view file may be an Adobe Acrobat file.

The following fields will be included on the report:

Page header information including:

Name of the Report
Run Date
NFIRS Data Year
The Database Filter in Effect
The Names of the Two Cross Tabulation Fields
Report Field Descriptions

Detail line information including:

Field Code Descriptors for Element 1
Field Code Descriptors for Element 2
Number of Occurrences
Percent of Column Totals
Column Totals for the Two Statistics Above

Fires Under Investigation Report

Tracking of fires whose ignition causes have been coded as “Under Investigation” after a designated interval of time has lapsed. The report allows identification of incidents whose causes have not been updated after an investigation is completed

The user will specify a lapse date filter after which “under investigation” incidents will appear on the report.

The following fields will be included on the report:

Page header information including:

Name of the Report	NFIRS Data Year
Run Date	The Database Filter in Effect
Incident Lapse Date	Fire Department Name

Detail line information including:

State	Incident Number
FDID	Incident Date
Fire Department Name	Incident Type
	Property Use

Summary line information including:

State
FDID
Total Incidents Under investigation

Mutual Aid Matching Departments Report (State Level Report only)

Tracking of incidents that have another department FDID and incident number linked for mutual aid resource identification purposes. The report allows identification at the State and Federal level of incidents that have been completed with a mutual aid link to another department and incident number; yet no matching incident appears in the state NFIRS database.

The user will specify a lapse date filter after which “broken link” incidents will appear on the report.

The following fields will be included on the report:

Page header information including:

Name of the Report	NFIRS Data Year
Run Date	The Database Filter in Effect
Incident Lapse Date	

Detail line information including:

State	Incident Date
FDID	Aid Given To FDID
Fire Department Name	Aid Given To Incident Number
Incident Number	Aid Given To State

Summary line information including:

State
FDID
Total Incidents With No Matching Records

Top Five Category Report

Top five coded field rankings summaries for loss categories ranked by frequency, percentages, injuries and deaths for a selected field. This report will produce output sorted several different ways.

The following fields will be included on the report:

Page header information including:

Name of the Report
Run Date
NFIRS Data Year
The Database Filter in Effect
Fire Department Name

Summary line information ranked by FREQUENCY including:

Selected Field Name

Rank 1. Code

Code Descriptor
Frequency
Percentage of Total
Total Dollar Loss
Civilian Deaths
Civilian Injuries
Fire Service Deaths
Fire Service Injuries

Total Dollar Loss
Civilian Deaths
Civilian Injuries
Fire Service Deaths
Fire Service Injuries

Rank 2. Code

Code Descriptor
Frequency
Percentage of Total
Total Dollar Loss
Civilian Deaths
Civilian Injuries
Fire Service Deaths
Fire Service Injuries

Rank 5. Code

Code Descriptor
Frequency
Percentage of Total
Total Dollar Loss
Civilian Deaths
Civilian Injuries
Fire Service Deaths
Fire Service Injuries
All Others
Frequency
Percentage of Total
Total Dollar Loss
Civilian Deaths
Civilian Injuries
Fire Service Deaths
Fire Service Injuries
Total Incidents

Rank 3. Code

Code Descriptor
Frequency
Percentage of Total
Total Dollar Loss
Civilian Deaths
Civilian Injuries
Fire Service Deaths
Fire Service Injuries

Repeat the summary line information above ranked by TOTAL DOLLAR LOSS.
Repeat the summary line information above ranked by CIVILIAN FIRE DEATHS.
Repeat the summary line information above ranked by CIVILIAN FIRE INJURIES.
Repeat the summary line information above ranked by FIRE SERVICE DEATHS.
Repeat the summary line information above ranked by FIRE SERVICE INJURIES.

Rank 4. Code

Code Descriptor
Frequency
Percentage of Total

Selected Statistics / Fire Department Management Activity Report

Summary statistics on frequency of incident occurrence and average manpower required. This query/report will be similar to the existing Selected Statistics and Management Activity reports in the NFIRS 4.1.

The following fields will be included on the report:

Page header information including:

Name of the Report
Run Date
NFIRS Data Year
The Database Filter in Effect
Fire Department Name

Summary line information including:

Fire Department ID	Total Chemical Release, Reaction Calls
Total Incidents	Total Electrical Wiring /Equipment Calls
Total Fires	Total Explosive, Bomb Removal Calls
Total Structure Fires	Total Attempt to Burn Calls
Total Confined Cooking Fires	Total Service Calls
Total Confined Chimney Fires	Total Person in Distress Calls
Total Confined Trash/Rubbish Fires	Total Water Problem Calls
Total Fixed Mobile Property Fires	Total Smoke Odor Problem Calls
Total Mobile Home Fires	Total Animal Rescue/Problem Calls
Total Vehicle Fires	Total Public Service Assistance Calls
Total Vegetation Fires	Total Unauthorized Burning Calls
Total Wildland Fires	Total Good Intent Calls
Total Brush Fires	Total Dispatched and Canceled Enroute
Total Grass Fires	Total Authorized Burning Calls
Total Outside Rubbish Fires	Total Prescribed Fire Calls
Total Dumpster Fires	Total Smoke Scares
Total Outside Storage/Equipment Fires	Total EMS Call Where Patient Was Transported
Total Crops/Orchard Fires	Total HazMat Investigations Only Calls
Total Incidents with Exposure Fires	Total False Alarms or False Calls
Total Exposure Fires	Total Malicious False Alarms
Total Overpressures/Ruptures/Explosions/Overheat	Total Bomb Scares
Total EMS and Rescue	Total System Malfunction Calls
Total Medical Assists	Total System Activations/No Malfunction
Total EMS Calls (no vehicle accidents)	Total Severe Weather or Natural Disasters
Total Vehicle Accident EMS Calls	Total Flood Assessments
Total Vehicle/Pedestrian EMS Calls	Total lightning strike (with no fire) Calls
Total Lock-ins	Total Citizen Complaints
Total Searches/Rescues/Extrications	Total All Other Incident Types
Total Hazardous Condition Calls	Total All Incident Types
Total Combustible/Flammable Spills and Leaks	

For each of the Totals above the following summary statistics are to be included on the Total Line:

Percent of Total of Incidents	Average Number of EMS Apparatus Responded
Average Number of Suppression Personnel Responded	Total Man Hours
Average Number of EMS Personnel Responded	Average Man Hours
Average Number of Suppression Apparatus Responded	Average Response Time

Data Quality Report

Tracks summary statistics on the frequency and percentages of Blank, Undetermined, None and Other category codes for the purpose of tracking and improving overall data quality. The report also generates statistics on the frequency of zero filling of numeric fields. The above codes may be valid entries in the NFIRS but high percentages in these categories may indicate a problem may exist.

The report user will select the module(s) for which the data quality report will be generated.

The following fields will be included on the report:

Page header information including:

Name of the Report	The Database Filter in Effect
Run Date	Reporting Level ID (Fire Department ID, State or Overall)
NFIRS Data Year	NFIRS Module Name

Summary line information for each field in the selected modules including:

Field Descriptor	Number Undetermined
Number Present	Percent Undetermined
Percent Present	Number None
Number Blanks	Percent None
Percent Blanks	Number Other
Number Zeros	Percent Other
Percent Zeros	

The above summary line information is separated by page breaks between modules if more than one module is selected by the user for the report.

Forms Based Incident Report

Fire Service incident reporting software will include this report which generates a paper copy of a selected incident or range of incidents that can be used as a document of record for the fire department. The report will be based on the standard paper forms and will follow the layout of the form modules, sections, blocks, fields and codes but is not restricted to duplicating the check boxes and on-form instructions. It is not necessary that this report utilize printer graphics and may generated as a simple text report. The lack of check boxes and form instructions may mean that front and back forms, such as the Basic Module form, may be combined and printed on one page.

Additional Reporting and Query Requirements

Additional reporting requirements include:

- Ad hoc queries supporting free form query structuring (“where” or for clauses).
- Ability to do simple summary functions (count, sum, average and the like).
- SQL query capability.
- Report Writer to allow generation of new and customized reports.

The following is a list of reports which have not been specified but may be added to the NFIRS 5.0 system before the final release.

Incident Location Report
State Profile Report
Average Department Response Time Report
Civilian Casualty Report
Fire Service Casualty Report
Ems Casualty Report

Wildland Fire Report
HazMat Report
Arson Report
Population Protected Report
USFA Data Quality Report (State/federal Level Only)

System Implementation Guidelines

System Selection Issues

Implementation of NFIRS 5.0 includes decisions about hardware, software, policy development, training, and planning. NFIRS 5.0 users have several options to consider when choosing their hardware architecture, software application and database for implementation. Decisions regarding these issues are made with consideration for the current demand for information collection and management, anticipated expansion in the number of users, and the expectations for data analysis.

NFIRS Version 5.0 is designed to make extensive use of the technology that is available today, while allowing for future new technologies. NFIRS 5.0 takes advantage of the Internet for transmitting local fire department data to both the state and national database.

The USFA will make standard NFIRS 5.0 software available to states upon request. This software is designed to provide data entry, validation, data conversion, data and system management services. It is designed to run on most 32-bit operating systems. It can interface with other databases through the Open Database Connectivity Standard (ODBC) at the local or state level. States that choose to distribute the Data Entry software to their departments must agree to provide all technical and help-desk support to departments within their jurisdiction.

Platform Architecture Overview

Stand Alone Personal Computers (PC)

Personal computers can be a cost effective approach to incident data collection and analysis. A stand alone PC is appropriate for situations in which there are a limited number of users who need to access the application, and concurrent access is not an issue. A fire department with a single station and a few qualified data users may be able to successfully use a stand-alone application. A PC application may be sufficient even if a large amount of data must be captured, provided the data need not be shared by users at other workstations. A department with several fire stations that sends all incident reports to a central location to be entered into the reporting application may also find that the stand alone application meets its needs.

The advantages of using a PC can include:

- Generally the least costly alternative in terms of initial cost and ongoing maintenance
- Can usually run on a moderately configured PC. Windows 95-based applications generally will require a pentium machine with 32 MB of RAM. Windows NT-based applications generally will require a Pentium or above machine with 64 MB of RAM.
- Administration and maintenance of the application is controlled at a single point and can be handled by a single person.
- A large amount of data can be collected and reported provided the PC hardware has the capacity to store and process the data.

However, the application and data can only be accessed from a single location by one person at a time. It may be difficult or impossible to add Local Area Network (LAN) access to the application at a later date and still maintain acceptable performance of the system.

TABLE 4-1. Hardware and Software Platform Guidelines - System Type: Stand Alone

Hardware	Pentium based PC with 32 MB of RAM is the minimum recommendation for Windows 95 or NT.
Operating Systems/ Network OS	Windows 95 Windows NT
Development Tools	PC Development tool that produce Windows based applications that utilize PC based file systems. Examples of such tools include, but are not limited to: <ul style="list-style-type: none"> • FoxPro Windows • Visual FoxPro • Paradox Windows • dBase Windows • Visual dBase • Clipper • Visual Basic
File System	PC file systems that support relational or hierarchical database structures. Examples of these file system include, but are not limited to: <ul style="list-style-type: none"> • Base files • Access Files • Btrieve files
Record Volume/Number of Users	Stand alone applications utilizing one of the listed file structures are capable of managing large numbers of records provided the PC running the application is equipped with adequate RAM and hard disk space. A well designed application should be able to handle record numbers in the 10,000 to 20,000 range on a stand alone PC.
DBA	Not applicable
System Administration	Not applicable
Hardware Maintenance	Optional

Local Area Network

Local Area Networks (LAN) expand the capability to include multiple users working concurrently in the system. An incident reporting application that is designed to run on a LAN is appropriate for situations in which there are a number of users who need concurrent access to the application. A LAN-based application running in a fire department that needs several people at the same location to use the application at the same time will provide connectivity and shared access. Depending on the amount of data being captured and the design of application software, a LAN also may be able to supply limited access to workstations outside the physical location of the network through remote access. A small LAN can be configured with one server providing account verification, file sharing, print sharing, and application sharing.

LAN advantages include:

- Access to the application and data concurrently by a set number of users.
- Controlled access to the application by the network administrator. Groups of individuals can be given access to just those applications for which they have a need.
- Controlled administration and maintenance of the application at a single point, with the results available to all workstations connected to the LAN.
- The ability to add workstations as more people need access to applications served by the network. It is also likely that additional software licenses will be required as users are added.

The LAN will require a higher commitment to system maintenance, both hardware and software, than a stand alone PC. A LAN, though, raises issues not encountered in PC platforms.

- The cost of hardware for a LAN can be considerably more than a stand alone PC. A dedicated server machine is needed as well as workstation PCs to access the server. Additional LAN hardware, such as network interface cards and cable, must also be purchased.
- A LAN will require someone to administer its functions: backups, software installation and upgrades, security validations, hardware and software problem determination, etc. This can be someone at the user's site who has been trained in the network operating system (NOS) or a vendor who has been contracted to handle the administration.
- A LAN will require a hardware maintenance contract to cover component failures and routine service.
- A large increase in the number of users on the LAN, or in the number of applications being run, may require additional servers.
- Adding remote access to the LAN may result in unacceptable performance of certain applications at the remote workstations.

The Hardware and Software Platform Guideline Table on the next page describes additional issues to be considered when exploring a LAN system.

TABLE 4-2. Hardware and Software Platform Guidelines - System Type: Small LAN

Hardware	<p>Workstations on the LAN should be a 486 based PCs and above is the recommended platform. 32MB of RAM is recommended as a minimum for Windows 95 and 64MB for Windows NT.</p> <p>Servers should be Pentium class machines with a minimum of 64MB of RAM. If possible SCSI hard drives should be used in the server.</p> <p>These recommendations are based on the current technology and industry standards.</p>
Operating Systems/ Network OS	<ul style="list-style-type: none"> • Windows 95 • Windows NT • OS/2 • Mac
Development Tools	<p>For small LANs with no remote access requirements PC development tools that produce Windows based applications that utilize PC-based file systems. Examples of such tools include but are not limited to:</p> <ul style="list-style-type: none"> • FoxPro • Visual FoxPro • Paradox • dBase • Visual dBase • Clipper • Visual BASIC <p>For larger single sites, LANs including those that require some remote access PC tools to develop Windows-based applications that can utilize RDBMS engines may be more appropriate. This will depend on the individual needs of the purchaser with regard to volume of data, number of remote users, and required response times. Examples of such tools include, but are not limited to:</p> <ul style="list-style-type: none"> • Visual FoxPro • Visual dBASE • Visual BASIC • Power Builder • SQL Windows
File System	<p>For small LANs with no remote access requirements PC file systems that support relational or hierarchical data base structures. Examples of these file systems include, but are not limited to:</p> <ul style="list-style-type: none"> • xBase files • Access files • Btrieve files <p>For larger single site LANs, LANs that require some remote access, or sites that will be capturing and processing very large amounts of data, a RDBMS is a better choice. Examples of these file systems include but are not limited to:</p> <ul style="list-style-type: none"> • SyBase • SQL Server • DB2/2
Record Volume/Number of Users	<p>Small LAN installations that are running applications that rely on xBase file structures must be aware that data bases with large amounts of data can greatly affect application performance. This degradation of performance can be particularly noticeable on remote access work stations. This is due to the inherent nature of the way these types of files are processed by the applications that use them. In order to perform certain tasks, the entire database must sometimes be transported over the LAN wire or, in a worst case scenario, over a slow telephone line. Depending on what level of performance you require, this type of installation can be expected to handle from several thousand to 10 or 20 thousand records. A small LAN running an application that is using RDBMS can handle very large amounts of data and still maintain an acceptable level of performance. However, for applications that will only be dealing with small amounts of data, this data access method will be slower than a simple flat file data base.</p>
DBA System Administration Hardware Maintenance	<p>Required for RDBMS</p> <p>Required</p> <p>Required</p>

Wide Area Network

A Wide Area Network can be effective in large Metro departments and in regional settings in which many departments agree to share a system. A large jurisdiction, city, county, or state with a regional central reporting agency may need an incident reporting application that is designed to run on a large LAN or wide area network (WAN). This platform is appropriate for situations in which there are a large number, or geographically dispersed, group of users who need concurrent access to the application. The heavy volume of data and remote access requirements in this situation require an application that takes advantage of a relational database management system (RDBMS) running on a centralized server. It also is likely that additional servers are required to handle account verification and file sharing requirements.

The advantages users gain with a WAN include:

- Wide access to applications and other services provided by the network to a large and geographically dispersed group of users.
- A centralized data repository for collection and reporting purposes.
- Applications utilizing RDBMS technologies are generally more scalable. This allows for future growth of the system.
- Applications using RDBMS technologies are much more secure than applications using many other data management systems.

The Hardware and Software Platform Guideline Table on the next page describes additional information to be considered when exploring a WAN system.

TABLE 4-3. Hardware and Software Platform Guidelines - System Type: Large LAN or WAN

Hardware	<p>Workstations on the LAN should be Pentium-based PCs as a minimum, although existing 486- based equipment may be used if performance is not an issue. 32MB of RAM is recommended for Windows 95, 64 MB of RAM is recommended for NT.</p> <p>Servers performing account verification file sharing, and print-sharing services should be Pentium II class machines with a minimum of 64MB of RAM. If possible SCSI hard drives should be used in the server.</p> <p>Application servers running the data base engine or other shared applications should be run from Pentium II class machines with 1 - 4 processors or RISC based machines.</p> <p>These recommendations are based on the current technology and industry standards.</p>
Operating Systems/ Network OS	<ul style="list-style-type: none"> • Windows 95 • Windows NT • OS/2 • MAC <p>The Network Operating Systems (NOS) includes Windows NT Server, Netware 3.x and 4.x, and OS/2 Warp Server. NOS on RISC machines should be UNIX or Windows NT.</p>
Development Tools	<p>For larger LANs and WANs, PC tools that develop Windows-based applications to utilize RDBMS engines are more appropriate. Examples of such tools include but are not limited to:</p> <ul style="list-style-type: none"> • Visual Foxpro • Visual dBASE • Visual BASIC • Power Builder • SQL Windows • Oracle Developer 2000
File System	<p>For larger LANs and WANs, a RDBMS is a better choice for a file management system. Examples of these files include but are not limited to:</p> <ul style="list-style-type: none"> • Oracle • SyBase • SQL Server • DB2/2
Record Volume/Number of Users	<p>Record volumes should be large enough, and remote access to data common enough, to make the investment in this type of technology worthwhile. Records numbering in the 10s to 100s of thousands are common in this type of system.</p> <p>Above 20 users and with remote access to data required. More users can be added until performance of the system bogs down. At that time, increasing the power of the hardware can be done to restore the system to an acceptable level of performance.</p>
DBA System Administration Hardware Maintenance	<p>Required</p> <p>Required</p> <p>Required</p>

Mainframe Computer

Mainframe systems can be cumbersome and complex, but can be appropriate where a municipal system is available. A mainframe-based solution is only possible if an existing hardware, software, and support structure already exists to support a mainframe environment. Even with such an environment, it is often difficult to obtain the programming and analysis support necessary to develop a large application. An organization with a mainframe environment will generally have an Information Systems Department that will work with the business area to determine the feasibility and economics of building a particular application on a mainframe. Anyone considering building an incident reporting application in this manner should consult with their internal data processing support organization.

Network Server Overview

File servers allow sharing of software applications through a central processing unit that downloads applications to workstations. Network servers can be divided into two broad categories: file servers that provide file sharing, print sharing, and authentication services, and application servers that run applications such as database engines or web servers. The two types of servers have different hardware and software requirements because they perform different types of services.

File Server

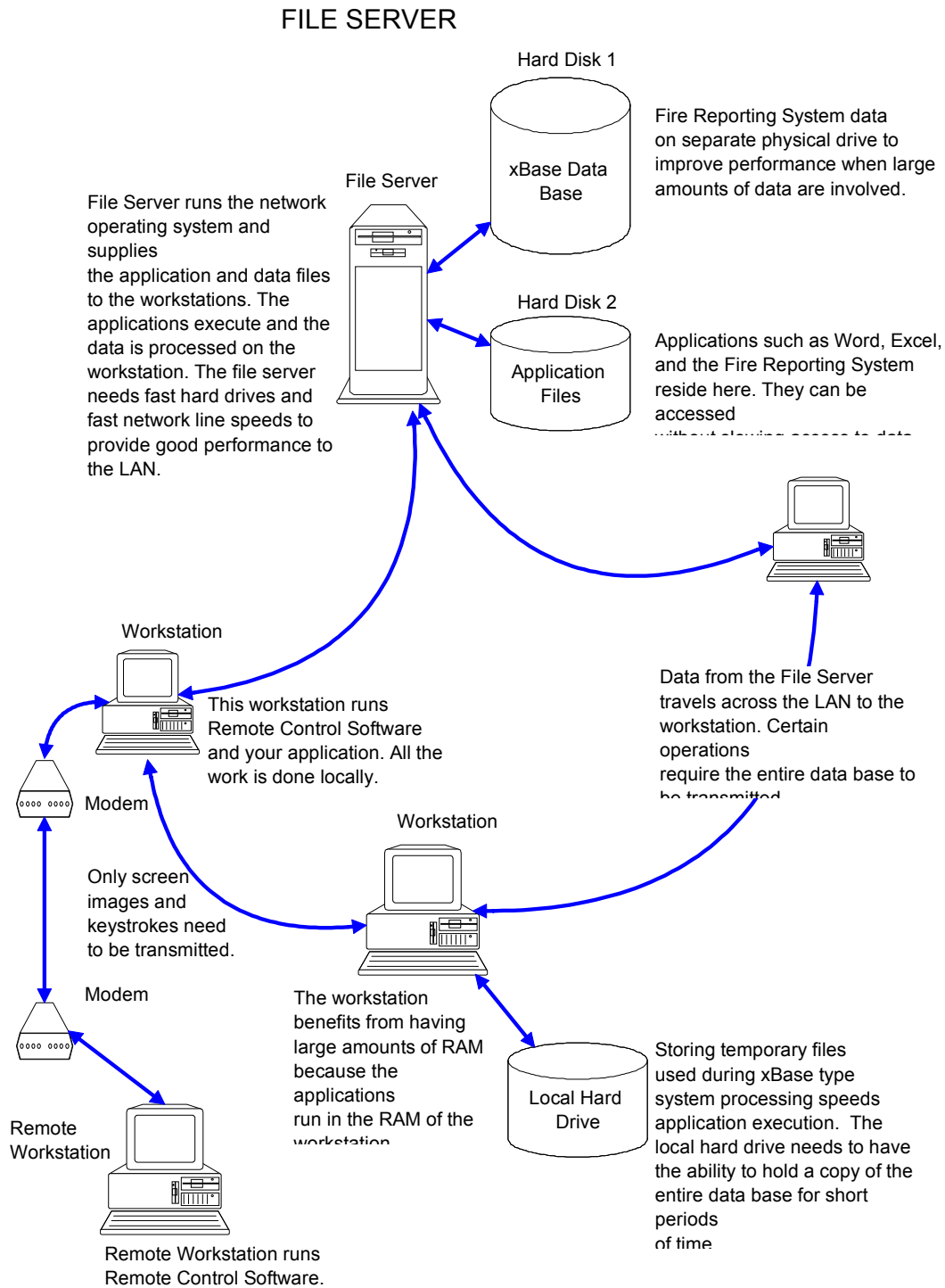
A file server runs a network operating system and supplies the application and data files to the network workstations. The applications execute and the data is processed on the workstation. The server needs fast, large hard drives and fast network adapters to provide optimum performance for the file and print sharing services provided by the server. The amount of RAM and processor speed are important to the user authentication and verification services provided by the server, but are usually not the limiting factor in file server performance.

An application that is being served from a file server loads the executable files into the RAM of the workstation. The workstation performs all of the work required by the application program. Data is transferred from the server to the workstation as it is needed to perform application functions. Applications that use flat file or xBase type databases can be slowed considerably by transmission times when databases become very large. In order to perform certain application functions, a copy of the entire database must be transferred from the server to the workstation for the application to process the data.

The network operating system that runs on the file server needs to have the ability to handle the sharing of disk and print resources among numerous connected workstations and to perform authentication and security functions. The NOS does not necessarily need to be a true pre-emptive multi-tasking operation system as the file server does not generally run any other applications.

The File Server Network Chart on the next page graphically displays a system that uses a file server.

FIGURE 4-1. File Server Network



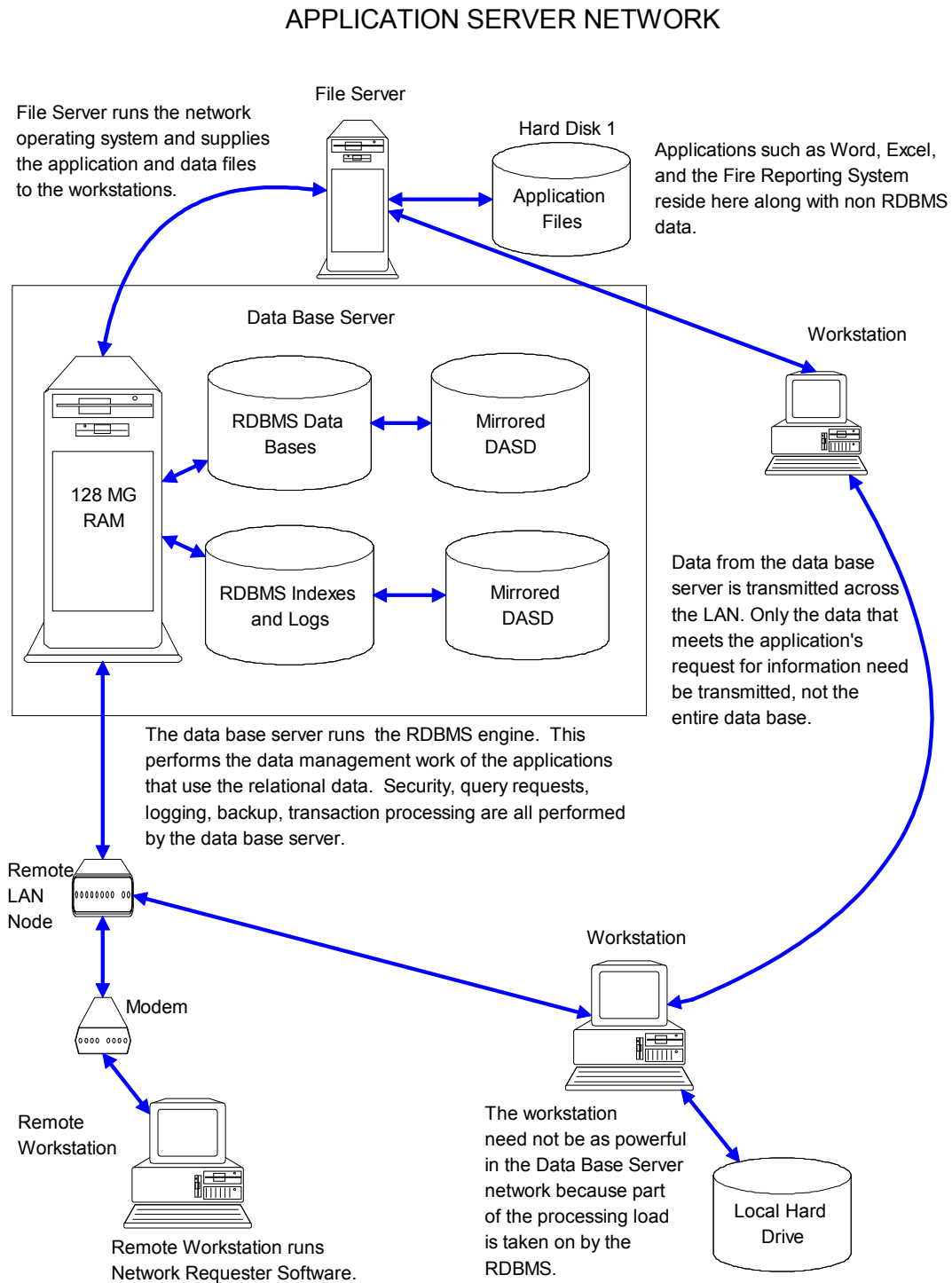
Application Server

Application servers share the workload with the workstations, making the hard disk size and data transmission speed less critical than in a file server system. An application server runs a network operating system and runs shared applications such as a database engine. The application server shares the work to be done with the workstation. A database engine that is running on the server listens for requests from the workstations and processes those requests. Only the request is transmitted from the workstation to the server and only the answer is transmitted from the server back to the workstation. This arrangement puts an emphasis on the amount of RAM and number and speed of processors on the application server. Hard disk size and speed as well as transmission speed is also a factor affecting server performance, but these factors are not as critical for application server performance.

The network operating system that runs on the application server needs to have the ability to process multiple requests for data or other services, such as communication services, simultaneously. A true pre-emptive multi-tasking operation system is best for this type of server.

The Application Server Network Chart on the next page graphically displays a system that uses an application server.

FIGURE 4-2. Application Server Network



Software Selection Issues

Software decisions can be guided by key questions that address the efficacy of the program and vendor support. Software for a fire incident reporting system can be acquired from USFA (state-supported option only) or purchased as a standard package, much the same as word processing and desktop publishing programs. They can also be developed for specific custom application. Several points should be considered with either software approach. Many of the questions listed here could be used to develop a Request for Proposal to solicit bids for the installation and/or to develop NFIRS 5.0 software in a jurisdiction.

Off-the-Shelf Products

These products are developed for distribution to multiple fire agencies. The purchaser buys the product in its current configuration with minimum customization.

- Is the software NFIRS certified?
- How many years has the vendor been in business?
- How much experience does the vendor have in fire service software?
- Does the vendor have any similar products?
- Can you obtain fully functional demonstrations of the program?
- Can the vendor provide a reference list of at least 10 customers?
- How will the vendor handle technical support and what is the cost?
- Can you review documentation and product tutorials?
- Is training available in the use of the software and how much does it cost?
- Is installation of the software available and how much does it cost?
- How does the vendor handle software fixes and what are the costs?
- How does the vendor handle maintenance releases and what are the costs?
- Is the software compatible with other applications, spreadsheets, word processing, third-party report generators, etc.?
- Will the vendor maintain this software with changes in operating systems?
- What are the system requirements?
- What are the system maximums, such as capacity for records (estimate your needs for 3 years)?
- Is the software compatible with your operating system?
- What data analysis is built-in?
- How does the vendor suggest handling data back-up and recovery?
- What is the vendor's primary business?

Custom Application Development

Custom applications demand that the vendor focus on meeting the customers needs and standards. These products are developed and designed to meet the specific needs of a customer. The following questions are additions to those asked for standard software.

- Will access to the source code be available?
- What happens should the company or the product be sold?
- What development language will the vendor use?
- How does the vendor suggest handling platform maintenance?

USFA Supplied Software

The United States Fire Administration has developed client and server software for the use of states and departments. The software is designed to work with most 32-bit operating systems, such as Windows 95, Windows NT, System 7, UNIX, OS/2, etc. It incorporates platform portability through use of the JAVA software development language and can interface with non-ORACLE databases through an Open Database Connectivity interface. When standard system software components are used at the state or metro levels, a custom integration with existing databases may be required. For more detailed information about the USFA software option See “Standard USFA Software Implementation Guidelines” on page 345.

Quality Control Issues

On-scene reporting is the foundation on which a reliable system is built. Quality control is based on devising and using procedures that ensure precise and reliable data. Precision means complete and accurate data collection at the recommended level of detail for each coded field; reliability means the data is collected and coded consistently. NFIRS data flows from the local level to the state level and then to the national level through the transfer file specification. The local fire department is responsible for the quality of data in the transfer file it submits to the state. The state is responsible for the quality of the data in the transfer file it submits to the national level.

Quality control measures ensure consistency and reliability. Quality control issues focus on:

- The software used to collect and analyze data
- The incident documentation process
- Editing the data and correcting errors
- Timeframes and deadlines for data submission throughout the system
- Accurate system participant information

Software Certification

The USFA certifies software so data transfers and editing are compatible among all 3 participant levels. All data from certified software will be included in the National Database. An embedded certification identification code identifies the vendor and version of the software transmitting the data and indicates that the data has passed all standard NFIRS 5.0 edits. Such data should not require any further edits upon submission to the state or national level.

All data submitted to the state on paper forms must be entered through certified software or it will be rejected at the national level. Any transaction file submitted to the state, which has not been certified by the USFA, will be rejected.

The state can use the standard NFIRS 5.0 edit software supplied by the USFA or use another means to edit the data, as long as it meets all of the standard NFIRS 5.0 edit specifications. For detailed information concerning the software certification process, see “NFIRS 5.0 Vendor Software Development Procedures” on page 311.

Documenting the Incident

The data collected to describe an incident is the foundation of the system, therefore, the field participants in the system will need:

- Initial training for data collection
- Feedback on completeness and accuracy
- Refresher training on data collection and coding schemes

Those who investigate incidents must be able to determine cause and record the incident for later data entry. They need to do a complete job of assembling the facts of the incident and then consistently record them each time. Therefore, after the initial training of all fire departments for NFIRS 5.0, there should be a provision for annual refresher training.

There also should be a system in place to double check the collection and data entry work. Field edits and relational edits can be built into the system that will reveal unacceptable and unreasonable data. Data management personnel utilize these techniques to improve and validate the data.

Data Edits and Error Corrections

Editing and correcting errors is a system-wide activity, involving local, state, and federal organizations. All errors resulting from the edit/update process need to be reported to fire departments and the submission of corrections from fire departments needs to be encouraged. This is especially critical for fatal errors, which prevent the data from being entered into the NFIRS database.

The corrections for any errors reported to the local fire department by the state should be included in the next month's submission of data to the state. Uniform coding at the national level also necessitates edit checks and quality control monitoring.

Timely Data Submission

Data submission deadlines are required, especially for the annual year-end cutoff to ensure final closure of the year. The state should establish and enforce a final data submission deadline for each year in order to close the processing. Without a final deadline, after which data is no longer accepted at the state level, data submissions will continue indefinitely. The state should encourage timely data submission from every fire department in order to submit the overall state's data to the national level in time.

Meeting data submission deadlines support state and federal efforts to analyze and disseminate the data. A continuous steady effort promoting participation of all fire departments in a state is important for data quality. If the percentage of participating fire departments is highly variable, then problem trends are not as reliable. This is especially true when larger fire departments are involved in varying levels of participation from year to year.

Statewide statistics for both fire and non-fire incidents are less accurate when a smaller percentage of fire departments are reporting and when a smaller percentage of incidents are reported. When the statewide problem statistics are lacking a significant percentage of fire incidents, the scope of the fire problem appears to be smaller than it actually is for that state. This results in less support of the fire service and less attention being paid to fire prevention efforts.

The information provided by a national reporting system loses value as it becomes less timely. The comparison of trends and the analysis of data queries from state to state and from metro department to metro department are not possible until the year is closed. The last state to submit its data to the national level determines when final national statistics and information will become available to all for that year.

Maintaining Fire Department Identification and Participation Information

Documentation of local participation helps states manage data submission and quality throughout the year. Two or more fire departments can merge into one, one fire department can split into more than one, new fire departments are formed, and existing fire departments cease to exist. Fire departments also change chiefs, phone numbers, addresses, and areas covered. It is important for the state to maintain accurate and up to date records on all fire departments.

It is also important to maintain logs of data received, data processed (edit/update), and errors found in data submissions by fire department for each month and year. It is important for a state's credibility to be able to answer questions like, "Did you get the March data I sent 3 weeks ago?" These logs provide a handy reference to keep close watch on participation

and timely reporting by fire department. Waiting until sometime after the final year-end deadline to realize that some fire departments have not submitted any data is too late.

Training Issues

Audience

There is a critical need for training at several levels of a primary fire reporting entity. This is critical to ensure accurate collection methods and strong support for the reporting system. Fire department personnel training can focus on cause determination and collection methods.

Fire Department Personnel

Those fire department members with reporting responsibilities, who work at the scene of the incident, are the important first link in the data collection process. Without their support and cooperation, the incident reporting system will break down at a most critical point.

Training needs for these department members include:

- **Cause Determination:** Accurate reporting demands that the causes of fires and other incidents be found whenever possible. The quality of data can be significantly improved with an organized training program in cause determination.
- **Data Definition:** Primary data collectors need to first know what items are to become part of the system and understand how to define each item. This will require a working knowledge of the system data dictionary. At this point, great contributions can be made to data quality as the collection is made at the proper precision with consistent interpretation.
- **Information Gathering:** Primary collectors must know and use the proper mechanics to get the data into the system. This includes utilizing the appropriate forms and techniques to move the data from the scene of the incident to the point of computer input. It may even include computer input if these fire department personnel are responsible for it.
- **Reporting Benefits:** For the purpose of motivation, firefighters and other primary data collectors need to understand how the collection of data benefits them in their work. They need to feel that the data is being used to increase their effectiveness as firefighters.

Data Management Personnel

Data management personnel training concentrates on information collection and quality control. These are the personnel who are responsible for processing the data into its final form, usually in a computer disk file. They are responsible for the overall management of the data system and handle the dissemination of information developed from the data. In small departments, they may be the same firefighters who collect data at the incident scene. However, in larger departments they will likely be specialists whose primary task is to process incident reports.

- **Data Collection System Mechanics:** Training is needed in how and when to interface with the other members of the collection team. Scheduling of data submission and specific responsibilities of all those involved is important to those managing the system, including when and how to submit data to other agencies.
- **Using the Computer Software:** Most collection systems will be computer-based and the data managers will be operators of this equipment. They will need detailed training and instructions on how to utilize the software and hardware needed to process data for the incident system. In addition, training may be needed in operating systems and local area network systems.
- **Quality Control Considerations:** Data managers have the major responsibility for maintaining high quality data. They need training in the many different techniques of ensuring that data is collected accurately and reliably.

Chiefs, Officers, and Data Users

These are usually senior department personnel who turn the raw data into usable and understandable information for distribution. They will take the computer files and manipulate and refine the data into tables, graphics and other forms appropriate for the intended audience.

- **Audience Recognition and Plausible Uses:** Managers need training in recognizing the many different audiences for incident information. This information should include appropriate ways to present the information to a particular user.
- **Data Analysis Skills:** Appropriate training for these managers would include the many different ways to analyze the data and turn it into meaningful information. They should be qualified to utilize statistical programs as well as graphic presentation tools.
- **Data Definitions:** This group must be able to understanding the exact meaning of every data element and the codes that are used to classify the incidents. Thorough training on the data dictionary will enable these managers to properly interpret the information as they develop presentations for end users.

Training Frequency

Just as operations training is incorporated into a department's routine, data collection and management need to become regular training events. Based on the needs of the department, training will be appropriate many different times. The size of the department, number of training personnel available, and the method of data collection all dictate the frequency of training events.

- **Change-over Time:** When a new reporting system is adopted there will be an urgent need to provide training for most of the department personnel. There will be many questions about procedures and features of the new system. This is an excellent time to provide those training classes while members are motivated to learn as much as they can about the new system. This training also will ensure that there is no drop in quality during the changeover.
- **Regular Drills:** Training drills afford an opportunity to provide reporting system training on a regular schedule. By giving an appropriate amount of training on a scheduled basis, personnel can learn the system without being pulled from their duties. This requires coordination from company officers.
- **Data Entry Point:** Training materials should be present at the data entry points for regular use and reference by those personnel. The frequency of training would be as needed by those entering data.
- **Scheduled Training Events:** It will be helpful to schedule training events periodically to introduce new procedures and reinforce established ones. There will be times when the only way to accomplish the training goals is to put groups together and present classes.

Training Approaches

A wide variety of training approaches encourages individual and group exploration of the data system and its impact on the department.

- **Organized Classes:** In these situations, an instructor is placed in a class of an appropriate size and a traditional training event occurs. Many innovative techniques may be used such as audio/visual and computerized procedures, but the training is held in the traditional class format.
- **Video Presentations:** This approach utilizes a videotaped program as the primary medium for training. It can be a class presentation that has been reduced to video, or it can be actual or simulated action situations used for illustration and training. It may be accompanied by written tests or response documents.
- **Computer-aided Instruction:** These training events are usually done on an individual basis and utilize a computer to present the information and perhaps receive responses from the learners. Major types of computer aided instruction include tutorials, interactive programs, and game simulations.

- **Help Files:** These informational documents usually accompany computer programs. They can now be produced as stand-alone documents for use in different learning situations. They can be displayed using standard computer programs.
- **Working Manuals:** These documents are developed and provided for the purpose of step-by-step guidance in accomplishing the subject matter. They take the form of instruction manuals, documentation manuals, and handbooks.
- **On-line Sources:** It is now possible to distribute training information and instructions over local area networks and the Internet. This makes it possible to reach large audiences with a common body of knowledge of interest to many users.

Implementation Action Plan

Integrating hardware, software, policy development, and training requires an action plan that will help manage NFIRS 5.0 implementation. An action plan is a powerful tool to assist in clarifying goals, objectives and determining who, what, when and how the objectives will be met. The Goal - implementing NFIRS 5.0 - has several objectives that need to be achieved for the system to be operational. Each objective has specific tasks that may be dependent on the completion of other tasks or objectives.

Following are several benefits gained from using an action plan process for NFIRS 5.0 implementation:

- To provide a management tool for achieving a successful implementation
- To give the project a focus and direction
- To furnish a blueprint for management to monitor project status
- To render a shared view of the project that leads to improved teamwork and cohesiveness

Following this section is a sample action plan for implementing NFIRS 5.0. The objectives are clearly measurable and the tasks for each objective have a clearly defined start/stop date and responsible party. It is best to keep timeframes for each objective under 6 months. Objectives that take longer than 6 months may be jeopardized by changing requirements and budgets.

The sample action plan objectives, tasks and time frames are dependent on the jurisdiction's operating environment. Changes will be required to tailor the plan to your jurisdiction. For example, budget approvals and contract awards may be done outside the organization and can take significantly longer to complete. This plan also assumes that any custom development can be completed in 8 weeks. This may be an underestimate if the work is being done by another governmental agency.

TABLE 4-4. Sample Implementation Action Plan (Sheet 1 of 2)

Objectives/Tasks	Duration (weeks)	Start Date	End Date	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1	1/1
PRE-PLAN ANALYSIS														
Determine costs for current system (hardware, software, staff, supplies)	2	3/1	3/15	---										
ID limitations with current system	2	3/1	3/15	---										
Estimate costs for NFIRS 5.0 (hard- ware, software, staff, materials)	2	3/1	3/15	---										
Contract information providers/part- ners	4	3/1	4/1	---										
ID marketing requirements	4	3/1	4/1	---										
ID training requirements	4	3/1	4/1	---										
Perform cost/benefit analysis	4	3/15	4/15	---	--									
Prepare recommendations/report	2	4/15	5/1		---									
Obtain approval to implement NFIRS 5.0	M		5/1			M								
REQUEST FOR PROPOSAL														
Select type of system (custom/off-the- shelf)	4	5/1	6/1			---								
Determine hardware architecture	4	5/1	6/1			---								
Prepare statement of work (functional description, hardware, data dictio- nary, edits, logic flow, file transfer, inputs, outputs, installation issues, maintenance issues and acceptance issues	6	5/1	6/15			---	-							
ID potential vendors	2	6/1	6/15				-							
Release RFP	M		6/15				M							
Bidders conference	M		7/1					M						
Select vendor	M		8/1						M					
IMPLEMENT NFIRS 5.0														
Refine plan	2	8/1	8/15						---					

TABLE 4-4. Sample Implementation Action Plan (Sheet 2 of 2)

Establish system policy, procedures	4	8/1	9/1						---					
Implement marketing plan	4	8/1	9/1						---					
Define data conversion plan	4	8/1	9/1						---					
Order, install hardware	6	8/1	9/15						---	---				
Obtain/develop NFIRS 5.0 software	10	8/1	10/1						---	---				
Develop test/acceptance plan	4	9/1	10/1							---				
Implement training plan	4	9/11	10/1							---				
Test/modify system	4	10/1	11/1								---			
Train users	6	10/15	12/1							---	---	---		
System operational	M		1/98										---	
MAINTENANCE/FOLLOW-UP														
Implement QA/QI														---
Increase participation														---
Conduct special studies														---
Generate reports														---
Refine policy and procedures														---

Standard USFA Software Implementation Guidelines

State Software

The United States Fire Administration has developed a standard software package which states may use to implement the NFIRS 5.0 standard described in this specification. Entities that choose not to develop their own NFIRS 5.0 compliant software may use the USFA provided standard software. The USFA software package consists of the following software components:

Data Entry Tool

The USFA Data Entry Tool provides the user the ability to enter, validate and maintain NFIRS 5.0 compliant incident information. The software can be used by departments to enter incidents and by the state NFIRS program manager to enter paper incidents and to manage the state database of reported incidents.

The Data Entry tool supports all paper forms associated with the national standard. In addition, the tool includes support for a number of options that provide states and local departments the ability to setup information outside the national standard. This includes the following:

Plus+ One Codes: Every coded field included in the national standard allows for one additional level of specificity, definable by the state. For example, if the national standard for a code is three digits, a fourth digit is provided for the states to provide more specific responses.

State and Local Information: To encourage states and local fire departments to participate, additional state and local fields may be captured using the Data Entry Tool. (Note: This information needs to be setup in the system using the Program Administration Tool, which is discussed below).

Special Studies: Special Studies track specific coded responses for information that is captured only for a specific period of time. These studies may be performed at the national, state and/or local level. This information can be setup and maintained using the Data Entry tool.

Fire departments interested in using the USFA standard data entry software must contact their state NFIRS program manager to see if the standard USFA software will be supported by their state. States choosing to provide the standard USFA data entry software to their departments must provide all technical and help-desk support for the software. If states lack resources to provide software support they may choose to implement other software options.

Data Validation Tool

One of the key objectives of the new NFIRS was to provide validation of incident information against the national standard at the earliest possible point in the reporting process, regardless of the tool used to enter the incident information. If the information is entered via the USFA Data Entry Tool, validation is automatically performed as the information is being entered.

For those choosing to enter incident information via 3rd party or custom systems, the USFA Data Validation Tool can be used to validate a delimited flat file containing the incident information. These delimited flat files will serve as the lowest common denominator between the national NFIRS tools and other NFIRS 5.0 compliant systems.

The process of validating incident information begins by reading all the records in the delimited flat file associated with a particular incident exposure. If all records are read successfully, this information is then validated against all codes and rules defined at the national level, as well as any additional state and local information requirements.

Data Conversion Tool

Many states and local fire departments will continue to report incidents using the NFIRS 4.1 standard. Another key objective for the new system is the ability to store and report on information entered in both 4.1 and 5.0 compliant systems. The new NFIRS 5.0 data structure will support the storage and reporting of NFIRS 4.1 compliant data. This data can be validated after entry and before transmission to the next level of the reporting process, using a process similar to that used in the USFA Data Validation Tool. NFIRS 4.1 data will go through the following conversion/validation processing as part of the NFIRS 5.0 system.

- NFIRS 4.1 data will be mapped to the NFIRS 5.0 format
- NFIRS 4.1 data will be marked as 4.1 data
- NFIRS 4.1 data will be validated against 4.1 rules

Program Manager Administration Tool

The new NFIRS 5.0 system is a dynamic, rules based system, which provides for state and local information needs. NFIRS Program Managers can use the USFA Program Manager Administration Tool for two main purposes.

First, this tool is used to enter and maintain state and local information requirements, including the following:

- Plus+ One Codes
- State Specific Rules and Actions
- State and Local Information
 - Coded Information
 - Numerical Information
 - Textual Information
 - Date/Time Information

Second, this tool is used by states to “Release” their information within the national database for national analysis. All participating states are given ultimate control over when their information can be used for national analysis. In an effort to encourage states to send their information more frequently during the year, and as a safeguard for states who opt to store all their incident information on the national database, each state is responsible for releasing their information for national analysis. Two key points should be noted in reference to releasing incident information.

- Only valid incidents may be released for national analysis.
- Releasing incidents does not include sensitive information (names, addresses, etc.). For details on security levels for sensitive information fields See “System Field Security Levels” on page 108.

System Administration Tool

The system administration tool is used for the day-to-day technical operation of the NFIRS 5.0 system. This tool is used for the following functions:

- Maintain users and user groups.
- Assign NFIRS service permissions to user groups.
- Manage NFIRS services.
- View system performance statistics.

Reporting Environments

The NFIRS 5.0 system offers three different reporting environments, designed to accommodate the various needs of different users within the NFIRS community; the reporting environments are as follows:

- FEMA Intranet Reporting.
- WWW Internet Reporting.
- Direct Data Access (ODBC) Reporting.

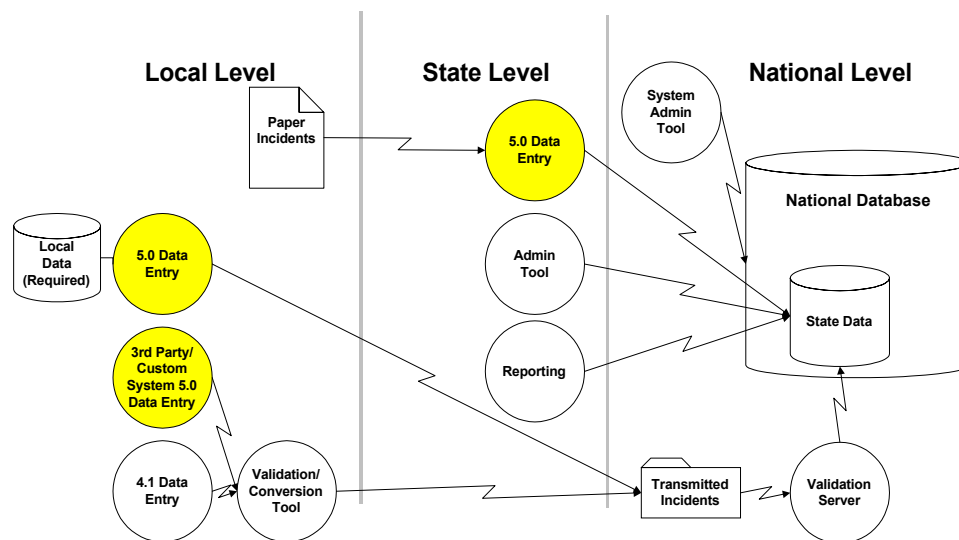
Implementation Options

For states choosing to use the Standard NFIRS 5.0 software there are two implementation options:

Implementation Using National Database

States may choose to use the FEMA National Database Server as their primary storage for incident information. Each state database resides in its own protected area on the FEMA server. Hardware and database maintenance, backups and system performance handling is performed by FEMA and USFA. Database management is done via the FEMA WAN by the state NFIRS program manager using the software components described above. These system software components are part of standard, USFA provided client software which resides on a computer in the state NFIRS program office. If data entry occurs at the state level, incident information may be entered directly into the national database via the NFIC Data Entry Tool. This entry may be accomplished only via the FEMA WAN. Local data entry, for a state which has implemented the NFIRS 5.0 System using the national database requires the use of a local database when entering information via the NFIC Data Entry Tool.

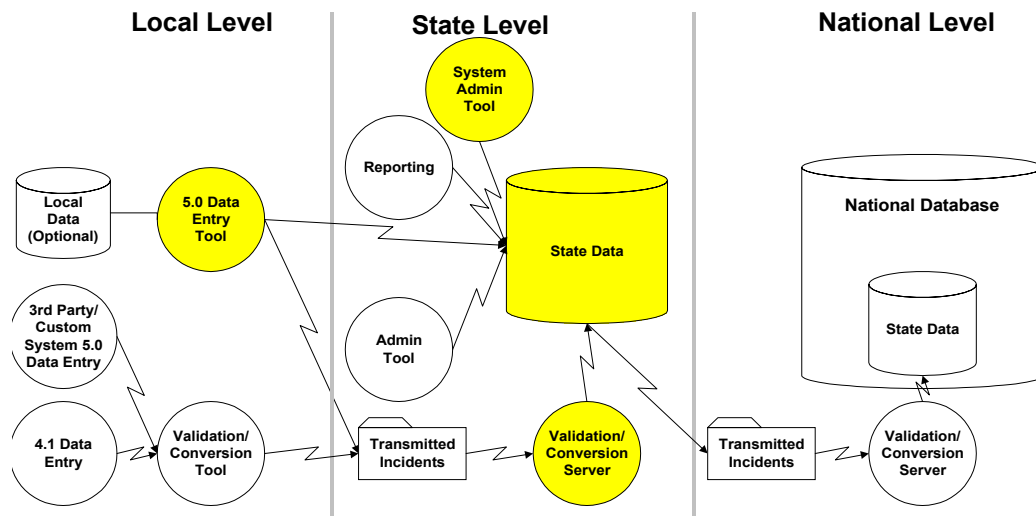
FIGURE 5-1. National Database Implementation Flow



Implementation Using State Database

The second option available to states is to allow states that desire a local version of the NFIRS 5.0 system access to the various system components for local implementation. This will require a local installation of the national Server based components and the use of an ORACLE database. States that choose this option will be required to provide their own hardware, disk storage, hardware maintenance, ORACLE Database Administrator (DBA), ORACLE maintenance and database backups. This step in implementation will occur only after the various components are determined to be stable under option one above. The following diagram illustrates this option:

FIGURE 5-2. State Database Implementation Flow



States that decide to develop their own state level software using this specification as a guide must use the second option described above with the following additional differences:

- The state must develop its own system and client software components.
- The state may choose to use a database other than ORACLE and transmit incidents through the Open Database Connectivity Standard (ODBC) or by using the standard Flat Transaction File format.

Hardware and Software Implementation Requirements

PLEASE NOTE: These requirements are subject to change pending final release of this specification!

National Fire Data Center Hardware and Software

At the national level, database sizing and usage estimates were used to specify the national database and web server. Database estimation factors included the following:

- National database server slated to hold 7-9 million incidents per year for the first three years.
- EMS incidents will total 80% of all incidents nationwide.
- 15,000 Fire Service casualties per 1,000,000 Fires.
- 15,000 Civilian casualties per 1,000,000 Fires.
- Database overhead for indices, views, etc. estimated at 100% raw data size.

From these estimates, the following hardware and common off-the-shelf software (COTS) were chosen for the national database server.

TABLE 5-1. Database Server Requirements

Database Server	Processor	Memory	Operating System	Storage	COTS
Sun Microsystems Enterprise Server 4000	2 *250 MHz CPU	512 MB per CPU	Solaris 2.5.1	75.6 GB (RAID-5 configuration) 72-144 GB 4mm Tape Autoloader	Oracle 7.3.4 JDK 1.1.4

In addition to the national database server, a national NFIRS Web Server was specified for reporting and FTP purposes. The following hardware and COTS were chosen for the national NFIRS Web Server.

TABLE 5-2. Web Server Requirements

WEB Server	Processor	Memory	Operating System	Storage	COTS
Compaq 2500 Server	2 *200 MHz Pentium CPU's	160 MB	Windows NT Server 4.0 (Service Pack 3)	<u>Primary:</u> 9.1 GB Wide-Ultra SCSI <u>Backup:</u> 4/8 GB DAT Tape	JDK 1.1.6 (or better) Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer (SSL) Service Visigenic's Gatekeeper

TABLE 5-3. NFIRS Application Server Requirements

NFIRS Application Server	Processor	Memory	Operating System	Storage	COTS
Three (3) Compaq Deskpros	233 MHz Pentium CPU	64 MB	Windows NT Server 4.0 (Service Pack 3)	Primary: 9.1 GB Wide-Ultra SCSI Backup: 4/8 GB DAT Tape	JDK 1.1.6 (or better) Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer (SSL) Service Visigenic's Gatekeeper

State, Metro and Local Hardware and Software

Depending on which components of the NFIRS 5.0 system are to be implemented at the state level and the volume of incidents processed by that state, different hardware and COTS minimum requirements apply. Please note that these hardware and software requirements are estimates. States should discuss their specific needs with the USFA NFIRS 5.0 Implementation Team.

TABLE 5-4.

NFIRS Client Tools - Client Operation / Networked Mode					
Processor	Memory	Operating System	Storage	Communications	Required COTS
120 MHz Pentium, Minimum	32 MB - Minimum	Windows 95-B, 98 - Minimum	30 MB Available Hard Disk	28,800 Kbps Modem - Minimum	TCP/IP Internet Connectivity
233 MHz Pentium or Better - Recommended	64 MB - Recommended	Windows NT 4.0 Workstation - Recommended		56K (V.90) bps - Recommended	

TABLE 5-5. Database Requirements (Less than 3,000 Incidents per Year)

NFIRS Client Tools and Local Database - Client Operation / Standalone Mode (Less than 3,000 incidents per year)					
Processor	Memory	Operating System	Storage	Communications	Required COTS
120 MHz Pentium - Minimum	32 MB - Minimum	Windows 95-B, 98 - Minimum	70 MB Available Hard Disk	28,800 Kbps Modem - Minimum	TCP/IP Internet Connectivity
233 MHz Pentium or Better - Recommended	64 MB - Recommended	Windows NT 4.0 Workstation - Recommended		56K (V.90) bps - Recommended	Microsoft Access 97 32-bit ODBC (part of Access install)

TABLE 5-6. Database and Server Requirements (Less than 10,000 Incidents per Year)

NFIRS Database and Server with Client Operations in Networked Mode (Less than 10,000 incidents per year)					
Database					
Processor	Memory	Operating System	Storage	Communications	Required COTS
166 MHz Pentium - Minimum	64 MB - Minimum	Windows NT 4.0 Server	4.1 GB Available Hard Disk	Network Connectivity	Oracle 7.3.4
300 MHz Pentium or Better - Recommended	128 MB - Recommended				Microsoft Access
Application Server (Minimal 1; Recommended 2)					
Processor	Memory	Operating System	Storage	Communications	Required COTS
166 MHz Pentium - Minimum	64 MB - Minimum	Windows NT 4.0 Server	30 MB Available Hard Disk	Network Connectivity	Visigenic's Visibroker for Java ORB (v3.2)
300 MHz Pentium or Better - Recommended	128 MB - Recommended				Visigenic's Secure Socket Layer 3.2 (SSL)*
					Visigenic's Gatekeeper**
					Netscape Server 3.5.1 or Microsoft IIS***

* Optional if Internet transmission will be used

** Required for Server Side Firewall Negotiation

*** May use existing web servers

TABLE 5-7. Database and Server Requirements (Greater than 10,000 incidents, But Less Than 1,000,000 Incidents per Year)

NFIRS Database and Server with Client Operations in Networked Mode (Greater 10,000 incidents per year but less than 1,000,000 incidents per year)					
Database					
Processor	Memory	Operating System	Storage	Communications	Required COTS
200 MHz Pentium - Minimum 300 MHz Pentium or Better - Recommended	128 MB - Minimum 256 MB - Recommended	Windows NT 4.0 Server	9.1 GB Available Hard Disk - Minimum 3 4.1 GB Hard Drives (Raid 5 configuration) - Recommended	Network Connectivity	Oracle 7.3.4
Application Server (Minimal 1; Recommended 2 or more)					
Processor	Memory	Operating System	Storage	Communications	Required COTS
200 MHz Pentium - Minimum 300 MHz Pentium or Better - Recommended	64 MB - Minimum 128 MB - Recommended	Windows NT 4.0 Server	30 MB Available Hard Disk	Network Connectivity	Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer 3.2 (SSL)* Visigenic's Gatekeeper** Netscape Server 3.5.1 or Microsoft IIS***

* Optional if Internet transmission will be used

** Required for Server Side Firewall Negotiation

*** May use existing web servers

TABLE 5-8. Database and Server Requirements (Greater than 1,000,000 Incidents per Year)

NFIRS Database and Server with Client Operations in Networked Mode (Greater than 1,000,000 incidents per year)					
Database					
Processor	Memory	Operating System	Storage	Communications	Required COTS
2 or more 200 MHz Pentium - Minimum Multiple 300 MHz Pentium or Better - Recommended	128 MB per CPU - Minimum 256 MB per CPU - Recommended	Windows NT 4.0 Server or Solaris	25 GB Available Hard Disk - Minimum 1 9.1 GB Hard Drive (System) 5 9.1 GB Hard Drives (Oracle) - RAID 5 configuration	Network Connectivity	Oracle 7.3.4 Oracle Parallel Query Option
Application Server (Minimal 2; Recommended 3 or more)					
Processor	Memory	Operating System	Storage	Communications	Required COTS
2 or more 200 MHz Pentium - Minimum Multiple 300 MHz Pentium or Better - Recommended	64 MB per CPU - Minimum 128 MB - Recommended	Windows NT 4.0 Server or Solaris	30 MB Available Hard Disk	Network Connectivity	Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer 3.2 (SSL)* Visigenic's Gatekeeper** Netscape Server 3.5.1 or Microsoft IIS***

* Optional if Internet transmission will be used

** Required for Server Side Firewall Negotiation

*** May use existing web servers

Pre-Implementation Activities Guide

Prior to the implementation of the NFIRS 5.0 system, there are a number of activities that need to take place. The following are pre-requisites in order to install and implement the 5.0 system regardless of software development or configuration choices.

- Assemble implementation team
- Acquire and install appropriate hardware and software
- Inform software vendors of any state/local requirements
- Establish appropriate network connectivity
- Train system and program administrators
- Assemble specific data requirements
- Plus-one codes
- State and local data requirements
- Additional validation rules
- Train end-users on data entry
- Setup end-user support system
- Reproduction and distribution of materials